

**An investigation into the role of serendipity, effectuation, and
entrepreneurial marketing in fast-growth entrepreneurial firms**

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Personal Statement

Before I began my PhD, I worked as a market researcher in large and small companies. After six years, I started my own firm to help marketers and entrepreneurs manage their companies efficiently. Observing many successful and failed entrepreneurs and reading about great entrepreneurs provoked my interest and curiosity to find the reasons for being a success or a failure; I wondered why some of them could succeed while others could not. Apart from stand out traits such as need for achievement, perseverance, and being very energetic, one question always stood out in my mind: Were they lucky? At the time, I personally did not believe in luck. In my opinion, we build our own future, but going further in my career; I wondered whether some elements of luck do exist. Reading stories of great entrepreneurs, I learned that at some stage in their lives, they were fortunate that something happened (or did not happen) to them that resulted in their success. In addition to these biographies, I became intrigued about how these entrepreneurs managed their firms. Thus, I started my journey as a PhD candidate and investigated why some firms are successful. I tried to explore the DNA of successful firms; however, it was not what I was looking for. I changed my direction toward the main question that intrigued me; the role of luck in business. My initial review of the literature led me to ask whether luck exists, however, we cannot ignore the ability of entrepreneurs at the same time. I read even more papers, and eventually, found an approach to address the question that may explain why some are successful while others are not. And then, my PhD journey began after a year of wondering about the topic!

Abstract

This thesis investigates the role of serendipity, effectuation, and entrepreneurial marketing in fast-growth entrepreneurial firms. Using a qualitative paradigm, multiple case studies and cross-country approaches, the study aims to explore the interrelationships among these constructs and answer the main research question relating to their contribution to fast growth. Semi-structured interviews were conducted with twenty fast-growth firms in New Zealand and Iran from a range of sectors, and causal mapping method was used to map out the growth trajectory of each firm. Causal maps enable the researcher to find in what manner the firms achieved fast growth and what factors contributed to their growth.

The results suggest that serendipity is a precursor to fast growth and occurs generally at the start of a growth process. Serendipity is likely to take place at any stage of a firm life cycle, but more likely at the early stage of formation, alongside networks, pure luck, perseverance, environment and high-quality products and services. In addition to reviewing the three patterns of serendipity that are well-known in accidental scientific discoveries, we identify and introduce “Entrepreneurial Serendipity” as another distinctive pattern in entrepreneurship, whereby entrepreneurs look for any opportunity to start a business and explore an appropriate opportunity that comes along. Further analyses illustrate that entrepreneurs believe in the occurrence of serendipity in their day-to-day business; however, it indirectly contributes to fast growth mediated by two important elements: effectual thinking and entrepreneurial marketing.

The causal maps demonstrate that the combination of effectuation and entrepreneurial marketing directly and indirectly lead to fast growth. A majority of fast-growth firms start business effectually, often with limited resources and relying on whatever available means

they possess, but over time, they shift to causation logic with more planning and strategic decisions. Starting from an effectuation base, the participants had an entrepreneurial mindset at the outset and used specific tactics, such as an adapted marketing mix, relying on networks, innovation, ensuring a presence in the market, pro-activeness, and market intelligence through personal observation. These entrepreneurial marketing practices have led to fast growth and were widely employed by entrepreneurs, irrespective of firm size and age.

The thesis sheds some light on how fast-growth firms achieve considerable growth by looking at the relationship of serendipitous opportunity exploration and effectuate exploitation using entrepreneurial marketing. It contributes to the literature on serendipity and its development in entrepreneurship, and identifies serendipitous sources of opportunity in fast growing firms. The study confirms that effectuation logic and entrepreneurial marketing are instruments by which entrepreneurs exploit new opportunities and market products or services. Entrepreneurs from both New Zealand and Iran share similar growth trajectories, however, some Iranian entrepreneurs believe that spiritual values are important in exploring new opportunities and achieving fast growth. Finally, the study confirms that growth may start with a serendipitous exploration and continues with effectuation logic and entrepreneurial marketing.

Chapter One: Introduction

Box 1:1. Founding of TDI

TDI is an entrepreneurial firm specialising in online retail and review of digital products. The entrepreneur, Mr. H, is a 32-year-old male with a Bachelor's degree in Industrial Engineering and MBA degree majoring in Marketing and Online Businesses. He had no entrepreneurial background prior to starting TDI. He always had the idea to start his own business, but he did not know exactly what that would be.

About 10 years ago, Mr. H wanted to buy a digital camera. He shopped around, asking every store about different camera brands, features, and prices. Just by chance, he encountered a useful website comparing all brands and features in English. Then he tried to get some information in Farsi, the official language of Iran. He did not find anything in Farsi. This made him wonder about running a similar website to help others find information in Farsi. It seemed like a good business idea, but Mr. H. did not have the necessary resources.

He shared the idea with his twin brother. Together they developed the idea to launch a website comparing digital cameras and selling them online. They prepared computer programming for the first version of the website by themselves and worked from another brother's office because they did not have money to rent a place or hire staff.

The first version of the website was launched, with amazing results. The website got lots of traffic from people wanting to use the website for information about digital cameras. Gradually, they started to sell some cameras. Mr. H had identified a good opportunity and the idea had worked. After a couple of months, they felt it was time to get their own office and hire some staff. After a year, the business was fully established.

Development was a new concern. They added other products to their portfolio and modified the website several times. They also developed a sub-website called TDI TV, which offers high quality, informational videos comparing different products. These videos are uploaded daily for TDI's audience. Mr. H asserts that the key factors to TDI's success are innovation, commitment to offering high quality services through their website, quick product shipment and the implementation of TDI TV.

According to Mr. H, TDI is the biggest review and online shopping website in Iran today, with 85% of the market share for online retail. According to Alexa (an internet information provider), TDI's website has the most viewers among business websites in Iran, and the company has expanded to 70 full-time employees. Mr. H was one of the top 10 entrepreneurship heroes to appear at the Global Entrepreneurship Congress in Moscow in 2014. The TDI website has won 10 awards from national and international institutions, including an award for best online shopping website in 2008 and 2013.

In the period of 2006 to 2012, TDI experienced a growth of over 100% in each year.

1.1 Aim

Our third key observation is *serendipity*, that is, elements of *chance* that may profoundly *alter* a firm's *growth* path. For small firms, reaction to specific *opportunities* may be a crucial *competitive advantage*, although it *deviates* from the deterministic view implicit in strategic *management textbooks*. (Meyer & Skak, 2002, pp. 186, emphasis added)

Growth and fast growth is a very complicated phenomenon which requires more attention from researchers (Moreno & Casillas, 2007). Only 6% of small firms grow consistently (Garnsey & Heffernan, 2005) and continuous growth is not common among entrepreneurial firms (Hamilton, 2012). Although much effort has been made to understand growth, the questions of how or why firms grow (Hamilton, 2012; Traù, 1996) and what differentiates them as fast-growth firms still remain (Almus, 2002; Lopez-Garcia & Puente, 2012). Entrepreneurs make decisions on firm growth (Wright & Stigliani, 2013), and fast growth is likely to be a result of entrepreneurial behaviour (T. Brown, Davidsson, & Wiklund, 2001). However, there is anecdotal evidence that some firms achieve fast growth as a result of favourable circumstances, such as being in the right place at the right time or exploring great opportunities just by accident (S. Brown, 2005).

Since using metaphor in management is a common way of understanding organisational phenomenon (Morgan, 1997), it may be postulated that the exploration of new entrepreneurial opportunities is similar to advances in science that were discovered through accident (Merton & Barber, 2004; Roberts, 1989). Some classic examples of accidental findings in science include the discovery of penicillin, X-rays, gravity and the way to measure the volume of irregular solids. Since these discoveries were accidental, some may call the scientists that discovered them lucky.

Oxford Dictionaries Online defines luck as “success or failure apparently brought by chance rather than through one’s own actions.” If we probe more into the nature of lucky discoveries, we realise that although luck plays a role in them, we cannot ignore the role of scientists, their intelligence or their wisdom in exploring, developing and expanding the findings (Friedel, 2001). This leads us to the concept of serendipity, which considers the roles of luck and the scientist’s own actions (Merton & Barber, 2004; Roberts, 1989). Serendipity in finding and exploring new things is, however, believed to be a result of “accident and sagacity,” rather than accident or luck alone (Friedel, 2001). Therefore, discovering new things in a serendipitous manner is a combination of lucky accidents and the scientist’s ability to find them.

Using new discoveries in science as an analogy for new opportunities in entrepreneurship may help researchers to consider the concept of serendipity in entrepreneurship. Since the new definitions of entrepreneurship and entrepreneurial firms are built upon exploring new opportunities (Shane & Venkataraman, 2000), new firms are the artefacts, or tools, that entrepreneurs use to exploit new opportunities or build new markets (Sarasvathy, 2003; Sarasvathy, Dew, Read, & Wiltbank, 2008), sometimes in a serendipitous manner.

The occurrence of serendipity is just one part of the story. The ability to realise that serendipity has happened is another and maybe the crucial part. Before Isaac Newton’s discovery, many people would have seen things fall, but his special knowledge and ability to recognise serendipity in the moment helped him to think about the force behind the fall – the gravity. Similarly, serendipity can help entrepreneurs to see desired and undesired opportunities, but they need special abilities to realise and use it (Friedel, 2001). Alertness, networks, knowledge and

experience are some elements that may help them to recognise and explore a serendipitous moment, and exploit the opportunity effectually (Sarasvathy, 2001, 2008).

This study investigates the effects of two concepts, effectuation and entrepreneurial marketing (EM), on the exploitation of new opportunities. Effectuation is the predominant logic of exploiting new opportunities in entrepreneurial firms (Sarasvathy, 2001, 2008). This logic assists entrepreneurs to exploit new opportunities with their available means and create a number of possible goals. Effectuation could also be the logic to exploit serendipitous opportunities (Sarasvathy, 2001). Since marketing knowledge and ability are important skills for entrepreneurs to have in order to recognise and use new opportunities (Carson & Gilmore, 2000a; Shane, 2000), and marketing in entrepreneurial firms is effectual and interwoven with effectuation logic (Hills & Hultman, 2011a), effectuation logic and entrepreneurial marketing can be seen as strategies to exploit new opportunities in the marketplace.

Thus, this thesis conceptualises the role of accidental opportunity exploration (through luck, chance, fate, fortune, etc.) in serendipity and discusses how serendipity influences opportunity exploration in entrepreneurship and how it affects the growth of the firms. We further conceptualise the ability of entrepreneurs to explore serendipitous opportunities and exploit them through effectuation logic and entrepreneurial marketing, and develop a model that shows a trajectory to fast growth in entrepreneurial firms. Therefore, the purpose of the present study is to explore how entrepreneurial firms achieve fast growth by investigating the influence of *serendipity*, *effectuation logic*, and *entrepreneurial marketing* on that growth. Exploring these three factors will potentially shed some light on understanding how firms exploit new opportunities that lead to intended (or unintended) growth.

1.2 Theoretical Background

The process of growth and the reasons behind it is a contentious topic among researchers. Generally, there is a two-fold meaning of growth in the literature: “change in amount” and “process of development”(Davidsson, Achtenhagen, & Naldi, 2005; Penrose, 1995). The literature indicates that the main emphasis of researchers is upon the amount of change rather than the process of change and necessary elements for growth (Davidsson et al., 2005). In other words, the primary focus of researchers is on different measures and numbers of growth rather than finding the main reasons for growth (Westhead & Wright, 2011). Despite growth heterogeneity and several indicators of growth (Delmar, Davidsson, & Gartner, 2003), scholars are still asking why and how firms grow (D. Brown, Earle, & Lup, 2005; Hansen & Hamilton, 2011; Traù, 1996).

To address this question, various studies have been undertaken to model the growth process and other elements necessary for growth. A review of the published literature by Gilbert, McDougall, and Audretsch (2006) shows that scholars focus more on the characteristics of entrepreneurs, resources of the firm, geographic location, strategy, industry context and organisational structure and system. Penrose’s theory of growth (Penrose, 1960, 1995) is one of the first attempts to describe growth of the firm. Penrose talks about the internal and external resources of the firm, which the entrepreneur brings into the firm or acquires from the marketplace, and argues that the growth of each firm is limited to its available resources.

From a different perspective, Storey (2011) synthesised the concept of optimism and chance (OC) into a theoretical framework to explain why firms experience different rates of growth and why some grow faster. He views optimism as an integral part of entrepreneurship and

chance as a driver of entrepreneurial efforts. In OC theory, the entrepreneur is like a “gambler” sitting in front of a “roulette wheel at a casino” and needs optimism to be in the game and chance to win (p. 312). In a similar vein a recent study based on Gambler’s Ruin (GR) theory found that the growth of firms is very close to random and is sometimes a play of chance (Coad, Frankish, Roberts, & Storey, 2012). GR theory compares an entrepreneur to a gambler sitting at a playing table who will continue to play as long as there is access to sufficient resources.

Fast growth also puzzles scholars. Extant literature generally revolves around four main elements of entrepreneurial firms to describe why they grow and what differentiates them as being fast-growth (gazelles) firms: entrepreneur characteristics, firm attributes, culture and resources, industry and environment, and finally, the existence of a strategy or willingness to grow. For example, Moreno and Casillas (2007) found that resources of small and medium-sized enterprises (SMEs) and access to new knowledge are principal reasons for fast growth, which is closely related to the ability of the SME to be involved in external networks and benefit from them. Eckhardt and Shane (2011) found that technological innovation is a very important element in finding new opportunities to grow quickly, and the number of fast-growth firms is positively related to the number of scientists employed by those companies. Entrepreneurial strategies, firm resources, and environment are some other elements that differentiate fast-growth firms from slow-growth firms (Y. Zhang, Yang, & Ma, 2008).

Reviewing available literature shows a gap with respect to the role of intangible elements, like accidental opportunity exploration, in fast growth. A few studies like Ennis (1999) and Wanger (1992) found that good fortune and luck exist and might play a role in growth of the firm. Studies like Coad et al. (2012) and the OC theoretical framework highlight growth as a

result of lucky circumstances. Nevertheless, it appears that scholars and practitioners still do not know much about the role of unpredictable events, which we conceptualise in this study as serendipity, in the growth of firms.

Although serendipity is a less popular research subject in many fields, including management, marketing and entrepreneurship, there is growing literature on its role in science. The history of some scientific discoveries, such as the discovery of X-ray by Röntgen, gravity by Isaac Newton, and the way to measure the volume of irregular solid by Archimedes, are some general examples of serendipity (Friedel, 2001; Merton & Barber, 2004; Roberts, 1989; Stoskopf, 2005). Friedel (2001) has categorised three distinctive patterns of serendipity in science, which are characterised by their historical background as pure instances of serendipity: Archimedean serendipity (looking for A and finding A), Columbian serendipity (looking for A and finding B), and Galilean serendipity (finding something that was unsought).

There is no comprehensive empirical study about serendipity and its role in exploring new opportunities or in the growth of the firm. However, the role of serendipity, particularly in the exploration of new opportunities, is well-discussed in Dew's (2009) conceptual framework. He defines serendipity as a search leading to unintended discovery and indicates that "entrepreneurship is a series of random collisions" (p. 735). He proposes a domain of opportunity discovery consisting of three conceptual building blocks that would facilitate serendipitous discovery. In his model, serendipity revolves around the interaction of knowledge, search, and contingency.

Exploiting opportunities that have recently been explored, possibly as the result of a serendipitous moment, is what entrepreneurs do to create new markets or products (Sarasvathy,

2001; Sarasvathy, Kumar, York, & Bhagavatula, 2014; Shane & Venkataraman, 2000).

Effectuation is the logic of exploiting new opportunities; it refers to an entrepreneur's thinking and decision-making process (Sarasvathy, 2001). Sarasvathy (2001) argues that entrepreneurs face a dilemma when exploiting a non-existent opportunity, and are more likely to use their given means to create a favourable goal than to reach a pre-defined goal. Leveraging contingencies is one of the principles of effectuation that may help entrepreneurs meet a favourable goal through unpredictable incidents. From a broader perspective, effectuation affects the logic of decision-making in opportunity exploitation, and eventually influences the performance of the firm (Read, Song, & Smit, 2008).

Without proper marketing strategies, opportunities would not be exploited successfully. Entrepreneurial marketing, which is often employed by entrepreneurial firms, is another tool to explore and exploit new opportunities (Morrish, 2011). A framework for EM is established through the investigation of entrepreneurial behaviour and marketing needs in turbulent environments and hyper-competitive markets, and facilitates exploiting new opportunities (Hills & Hultman, 2011a; Hultman & Hills, 2011; Morrish, 2011; Morrish & Deacon, 2011). Morris, Schindehutte, and LaForge (2002) link EM to opportunity recognition and indicate that EM enables firms to search for opportunities through innovation, risk-taking, and value creation for customers. Morrish (2011) suggests that any firm that uses the concept of EM is an entrepreneurial firm, and this concept enables it to be more flexible in the exploration and exploitation of new opportunities. Indeed, EM is seen as a culture and strategy that influences the whole firm's activities, decisions and exploitation of opportunities (Miles, Gilmore, Harrigan, Lewis, & Sethna, 2014).

In terms of the logic of decision-making, EM and effectuation are similar in nature. They form an effective instrument to exploit new opportunities (Hultman & Hills, 2011; Nijssen, 2014). On one hand, effectuation has received a great deal of attention from scholars in recent years, and is gradually becoming a mature concept (Perry, Chandler, & Markova, 2011). On the other hand, the relationship between effectuation and other firms' concepts, such as growth and entrepreneurial marketing, needs much research (Hills & Hultman, 2011a). The interrelationship between effectuation and fast growth has not had much attention in the literature. There is however one deductive study that shows a significant positive relationship between the effectuation element of entrepreneurs' decision-making and firm performance in terms of return on investment (ROI), sales growth, and revenue growth (Read et al., 2008). EM is also widely observed in entrepreneurial firms (Stokes, 2000a) and is very similar to effectuate thinking (Hills & Hultman, 2011a). In this respect, this study investigates how effectuation and EM contribute to fast growth, and how they interrelate as tools to exploit new opportunities.

Therefore, this research aims to investigate the role of serendipity in exploring new opportunities by focusing on how entrepreneurs exploit these opportunities using effectuation and EM, thus exploring how these elements lead to fast growth in entrepreneurial firms.

1.3 Research Problem and Questions

In the first phase, this research seeks to shed some light on how serendipity influences opportunity exploration and how it can be operationalised as an intangible element in the process of fast growth in entrepreneurial firms. In the second phase, the research investigates effectuate logic of entrepreneurs' decisions and entrepreneurial marketing strategies to exploit opportunities and achieve fast growth. Therefore, the research question should be consistent with the nature of

the research aim. As such, our research questions reflect the relationship among the three constructs in the study.

It is, likewise, important that research questions are clear and understandable and cover all crucial stances of the problem. Creswell (1994) suggests one or two main questions followed by no more than five to seven sub-questions in qualitative research.

The main research question in this study revolves around the role of serendipity, effectuation, and EM in fast growth. More specifically, the study investigates these constructs in fast-growth firms. Given that growth can be viewed in a multitude of ways, our focus will be on revenue growth (Tan & Smyrnios, 2011). Thus, the main research question is:

RQ: How do serendipity, effectuation logic, and entrepreneurial marketing affect fast growth in entrepreneurial firms?

In order to address the main question, the investigation will be guided by the following questions:

RQ1: How does serendipity manifest in entrepreneurial opportunity exploration and how does it affect a firm's fast growth?

RQ2: How do entrepreneurs use effectual reasoning in relation to a firm's fast growth?

RQ3: How do entrepreneurs use entrepreneurial marketing in relation to a firm's fast growth?

RQ4: What are the interrelationships between serendipity, effectuation, and EM in fast-growth firms?

1.4 Research Propositions

To address the research questions, the researcher has to establish a connection between concepts and build a conceptual framework (Gibbs, 2007; Yin, 2009). Since this thesis examines several concepts, the researcher needs to be clear about the relationship between the research constructs and their contribution to fast growth. Therefore, based on the available literature, a connection will be made between constructs. The framework of the research will then be explained, and the propositions will be presented in Chapter 3. Propositions assist the researcher to narrow down the research to outcomes related to the research problem and question.

1.5 Methodology

This research aims to explore the role of serendipity, effectuation, and EM in fast-growth firms. Because of the nature and scope of the study, it is appropriate to use qualitative methods. More specifically, multiple case study and cross-country approaches (Chetty, Partanen, Rasmussen, & Servais, 2013; Teagarden et al., 1995) were applied to discover the effects of the main constructs in an international and cross-cultural setting. New Zealand (NZ) and Iran (IR) were selected to represent these perspectives to establish whether these constructs differed in western and eastern business environments. Given that growth can be viewed in a multitude of ways, the focus was on revenue growth. Additionally, doubling turnover during a 4-year period was considered the index for fast-growth firms (Littunen & Niittykangas, 2010; Tan & Smyrnios, 2011). For the NZ participants, fast-growth firms were selected from the Deloitte Fast 50 reports between 2010 and 2012. In Iran, the assistance of a consulting institute was sought to obtain a list of fast-growth Iranian firms. Based on the entrepreneurs' willingness to take part in this research,

semi-structured interviews (Littunen & Niittykangas, 2010; Storey, 1996) were conducted with the entrepreneur or founder of each participating firm.

Data analysis was done using causal mapping. A causal map is a cognitive instrument that builds cause and effect relationships between concepts and illustrates mental models (Ackermann & Eden, 2011; Axelrod, 1976b; Narayanan & Armstrong, 2005). Applying this method in contrast to many previous descriptive studies (Lopez-Garcia & Puente, 2012) helps the researcher to investigate the fast growth phenomenon in a process-oriented perspective (Wright & Stigliani, 2013) that has a start and end point to look at the underlying process and layers of fast growth.

1.6 Thesis Structure

The structure of presenting this thesis is highly dependent upon the constructs in the research. This research investigates three principal constructs and fast growth. The theoretical background of the study is discussed in detail in Chapter 2, segregated by construct. The conceptual framework is illustrated in Chapter 3. Chapter 4 presents the applied methodology in two main sections. The first section includes a review of appropriate paradigm and case study method, and the second discusses the analysis method using causal mapping. Chapter 5 outlines the findings for the first phase of the research investigating the role of serendipity in fast-growth firms and introduces a new pattern of serendipity. Chapters 6 and 7 look into the role of effectuation and entrepreneurial marketing as a tool in opportunity exploitation. Verification of the proposed model is presented in Chapter 8 and the final chapter discusses the implications and contributions of the study.

1.7 Expected Contribution to the Field

This study seeks to conceptualise the role of serendipity in achieving fast growth in entrepreneurial firms, which is mediated by two important concepts: effectuation and EM. The proposed model potentially explains how and why companies find new opportunities and grow faster. The concept of serendipity, combined with the ability of entrepreneurs to explore (Shane & Venkataraman, 2000) and exploit opportunities using effectuation and entrepreneurial marketing as their dominant behaviour (Hills, Hultman, & Miles, 2008; Morris et al., 2002) offers a promising base to explain how such growth happens. Theoretically, this can extend understanding of why some firms are more successful and how serendipity can affect this success. The outcomes may also explain how effectuation and EM could facilitate the exploitation of new opportunities that emerge from serendipity. This process-oriented view toward fast growth is another important contribution of this research and helps scholars avoid being merely descriptive of the phenomenon (Wright & Stigliani, 2013). Another contribution of this research is the method that was used. The benefit of causal mapping is that it allows the tacit knowledge of entrepreneurs and managers to surface; this knowledge is often difficult to express (Ambrosini & Bowman, 2008). Applying this method potentially assists researchers to find hidden concepts that could lead to fast growth. At the practical level, findings are useful to entrepreneurs to show how they can find new opportunities and what strategies they can apply to exploit them. At the level of opportunity exploration, practitioners will also acquire a new perspective on the role of serendipity and the element(s) surrounding this intangible concept. We also hope that these findings assist novice entrepreneurs to benefit from the experiences of the participating entrepreneurs and to grow their firms quickly. Finally, the findings will be helpful in understanding what successful firms do to achieve fast growth.

Chapter Two: Review of Literature

2.1 Introduction

As a research field, entrepreneurship is extremely broad. It cuts across multiple disciplines, including psychology, sociology, management, marketing, and economics, thus it is not possible to cover every facet in a single study. To develop a theoretical framework, this chapter focuses on the core of the research, beginning with the definition of *entrepreneurial firm*. The following section reviews the relevant growth and fast-growth literature. The concept of serendipity will then be discussed in depth, followed by a discussion of the role of serendipity in entrepreneurial firms. Finally, effectuation logic and entrepreneurial marketing are explored to form a clear framework and position this research within the literature.

2.2 Entrepreneurial Firms

Entrepreneurial firms have attracted considerable debate among scholars in terms of their nature and origin. Some scholars believe that entrepreneurial firms are enabled to develop because of special characteristics or traits that their entrepreneurs possess, such as a need for achievement, desire for responsibility, preference for moderate risk, perception of probability of success, stimulation by feedback, energetic activity, future orientation, skill in organising, and attitude toward money (e.g. Schollhammer & Kuriloff, 1979; Schumpeter, 1943). Other scholars stress the entrepreneur's ability to create and organise the firm (Carland, Hoy, & Boulton, 1984; Gartner, 1990). These perspectives argue that simply possessing special characteristics and traits is not enough to run an entrepreneurial firm. Entrepreneurs should also possess the skills to undertake different roles, such as the role of innovator or manager. The combination of special

characteristics and skills to perform different roles in the firm differentiates entrepreneurs from non-entrepreneurial managers, and an entrepreneur with this combination can form an entrepreneurial firm. Some scholars view entrepreneurship through an economic lens. Through this perspective, entrepreneurial firms are created to add more value to the economy in an uncertain environment (Alvarez & Barney, 2007; Casson, 2005; Langlois, 2007). However, as Alvarez and Barney (2007) argue, much of the literature on entrepreneurship has not addressed why entrepreneurs decide to exploit market opportunities by creating and organising entrepreneurial firms.

In spite of the debate about the nature and origin of entrepreneurial firms, researchers note that they are generally young, small, innovative, proactive, risk-takers and in industries with developing technologies, and most of them grow very fast (Coad, Daunfeldt, Hözl, Johansson, & Nightingale, 2014; Das & He, 2006). Growth therefore, is a key element in entrepreneurial firms.

All new ventures are not entrepreneurial in nature. Entrepreneurial firms may begin at any size level, but key on growth over time. Some new small firms may grow, but many will remain small businesses for their organizational lifetimes. (Carland et al., 1984, p. 357)

In addition, in entrepreneurial firms, ownership and decision-making is typically centred on entrepreneurs (Glancey, 1998). Covin and Slevin (1991) suggest that entrepreneurial firms are made up of risk-takers who are innovative and proactive in their environments and behave entrepreneurially at three levels. The first level, top management, is comprised of entrepreneurs who are risk-takers in their decisions regarding investment and its return. In the second level, production, they are innovative in the face of technology changes, and have a tendency to be leaders in the market in terms of technology. At the third level, the pioneering nature of the firm, they have an aggressive characteristic against their competitors in the market.

In conclusion, an entrepreneurial firm can be defined as innovative, risk-taking and existing largely in an industry with developing technology. This type of firm develops in response to risky situations and uncertainty in the environment and creates new economic value. Entrepreneurial firms are run by entrepreneurs with special characteristics and abilities to organise them. These firms aim to grow and may produce new goods and services (Schumpeter, 1943).

2.3 Growth in Entrepreneurial Firms

An extreme position could be that fast growing is simply a matter of luck or chance.
(Brüderl & Preisendörfer, 2000, p. 6)

Growth, as an indication of success, is an important consideration for any business, irrespective of their size (Barringer, Jones, & Neubaum, 2005; Davidsson, Steffens, & Fitzsimmons, 2009). This phenomenon is very controversial among scholars, especially in smaller firms (Glancey, 1998). Although a large number of studies on growth exists, there is still much that we do not know about it (Davidsson et al., 2005). The first contentious issue arises from the interpretation of the meaning of growth in businesses. Therefore, the first step is to define growth in the context of this study.

Growth has a two-fold meaning (Davidsson et al., 2005; Penrose, 1995). The first refers to a “change in amount,” in terms of size, employees, assets, exports, number of products, market share and the like. The second suggests the “process of development.” Review of the literature on growth shows that the main emphasis of scholars has been on the amount of change in firms rather than the process of change and the factors necessary for growth (Davidsson et al., 2005; Leitch, Hill, & Neergaard, 2010). In other words, the primary focus of researchers has been on

different measures of growth rather than the reasons for growth (Westhead & Wright, 2011). For example, growth in age and size as measures has been examined in several studies (e.g. Beck, Demirgüç-Kunt, & Maksimovic, 2005; Evans, 1987; Hall, 1987; Liedholm, 2002; Wagner, 1992). Similarly, there are many studies that have examined other organisational factors, such as the number of employees, sales, profit, market share and assets, as a growth indices (e.g. Delmar, 1997; Szymanski, Bharadwaj, & Varadarajan, 1993; Weinzimmer, Nystrom, & Freeman, 1998). In relation to the heterogeneity of growth and a number of indicators that could represent growth (Delmar et al., 2003), the main question that arises here is why and how firms grow (D. Brown et al., 2005; Hamilton, 2012; Traù, 1996).

To address this question, McKelvie & Wiklund (2010) suggest that growth should be considered as a process rather than an outcome. Penrose's theory of growth (Penrose, 1960), which investigates growth as a process, is one of the first and best known studies and is arguably the origin of the resource-based view theory (Nair, Trendowski, & Judge, 2009). Penrose's approach is to find why some firms can grow and others cannot (Penrose, 1960, 1995). She argues that every firm has two types of resources: internal and external. Entrepreneurs create internal resources; whereas external resources are those that a firm gains from the marketplace in order to implement its strategies. She then indicates that growth of the firm is limited to its resources and development plans as well as an entrepreneur's willingness to grow. New opportunities are explored using entrepreneurial and managerial capabilities. McKelvie and Wiklund (2010, p. 272) construe that "[e]ntrepreneurial capabilities are a function of imagination, whereas managerial capabilities are based on the execution of ideas and are essentially practical in nature."

Based on Penrose's theory, McKelvie and Wiklund (2010), classify the different modes of growth into "organic growth," "growth by acquisition," and "hybrid models." Organic growth is a result of expanding the firm with internal resources. Growth by acquisition is similar to acquiring external resources in Penrose's theory, and hybrid growth is a combination of both aforementioned modes. Further studies show that growth of small firms is largely organic rather than the other two types (McKelvie, Wiklund, & Davidsson, 2006)

Along similar lines, Storey (1994) elaborates on the role of the three main factors in growth, namely entrepreneur, firm and strategy. He includes fifteen elements of growth such as motivation, education, entrepreneur, age and experience, size and location of firm, as well as products and technology. Expanding on this, Hansen and Hamilton (2011) conducted a study of small firms in New Zealand and found that four main factors are observed in grown firms that are not present in firms that do not grow: opportunistic approach toward external environment, innovation and flexibility of the firm, wide business networks of the entrepreneur, and ambition of the entrepreneur to grow. By investigating four entrepreneurial and international high-technology firms in New Zealand, Coviello and Munro (1995) similarly suggest that formal and informal networks of the entrepreneur assist the firm with finding new international opportunities and lead to more growth in terms of market development.

Garnsey and Heffernan (2005) note that new entrepreneurial firms seldom experience substantial growth, and continuous growth is also an unusual phenomenon. They argue that growth is often hindered by a lack of internal and external resources or the entrepreneur's unsuitable decisions in response to environmental changes that would keep the firm growing. Entrepreneur's unwillingness to grow is another element that halts the growth. Put differently,

Wiklund and Shepherd (2003a) propose that dynamic environments can create bigger opportunities for entrepreneurs, but growth is a function of an entrepreneur's motivation to decide to grow.

Storey (2011) offers a different point of view, explaining the growth of entrepreneurial firms based on optimism and chance (OC) theory. He considers optimism to be an integral part of entrepreneurship, and chance to be a driver for entrepreneurs. Storey talks about temporal growth and explains why firms experience different rates of growth. In his view, entrepreneurs' possessions, like human capital and social capital, are fixed in the short and medium term, so they cannot explain why entrepreneurial firms experience various growth rates. To describe temporal growth, which is in some cases followed by zero or low growth, OC theory combines two concepts, an entrepreneur's optimism and chance, as key to whether the business continues to grow. In OC theory, entrepreneurs are described as having a similar mindset to gamblers that sit in front of a roulette wheel, wanting to invest their money in the game. There are three groups of entrepreneurs. The first group is composed of modest winners who continue their game and remain at the table. The second group is composed of the big prize winners that may not stay at the table. In the business world, these are the entrepreneurs who sell their businesses. Finally, the third group is composed of those who win a few rounds or may not win any prizes at all. Yet, they remain at the table, and buy a new ticket, as long as they have sufficient resources to invest (which is highly dependent on their own wealth or access to borrowed wealth). They may withdraw from the game afterwards.

Using gambling as an analogy to describe OC theory shows us that growth in entrepreneurial firms is dependent on internal environment (in this case, entrepreneur optimism)

and external environment (chance). Optimism is highly dependent on the entrepreneur's perspective about the market situation and chance is a significant factor that could affect the future of the firm considerably. As Storey (2011, p. 317) remarks, "the approach recommended by this article is to explore the implications that 85 percent of new and small-firm performance reflects chance, and that 15 percent is influenced by the business owner or governments creating the environment for that business." Additionally, he argues that the OC theory is a new insight into the growth of small firms, and it could explain the failure, closure, and temporary growth in entrepreneurial firms.

In line with OC theory, a recent study applying Gambler's Ruin (GR) theory found that the growth of firms is very close to a random base, however, emphasised that a firm's resources, particularly at the initial stage of forming, are key factors in saving the firm at later stages (Coad et al., 2012). The central concept of GR is the decision of players to stay in the game, as long as they have access to sufficient resources. In contrast, Hamilton (2012) argues that the growth rate is neither a continuous, nor a random phenomenon, with the size of the firm contributing to its growth.

OC theory has not been without its critics. For example, Westhead and Wright (2011), note that OC theory fails to consider new developments in entrepreneurship. Some concepts are not clearly explained, and some aspects are ignored. For instance, the process of entrepreneurial learning in Storey's theory is limited to Jovanovic's learning process, which means that being in the business longer equates to more knowledge for entrepreneurs to realise their entrepreneurial talent to stay in or quit the business. Westhead and Wright (2011) stress that the learning process in entrepreneurship is not linear. Entrepreneurs learn about their businesses and search for new

opportunities simultaneously, in the same way that serial entrepreneurs are able to handle one or more enterprises at the same time to reduce their risk. Westhead and Wright (2011) conclude that if OC theory is to contribute to the field of entrepreneurship, it should be careful about the established norms in the field. Another aspect that is dismissed in OC theory is entrepreneurial learning (Sassmannshausen, 2012). Sassmannshausen (2012) challenges OC theory by evaluating a governmental program for novices, arguing that this type of training leads to successful entrepreneurs, and thus OC theory does not explain the only elements that lead to achieving growth.

Growth can be endogenous and exogenous. Some scholars view growth as an endogenous factor and believe that an entrepreneur's ambition is a very significant factor in growth (Davidsson, 1991; Hansen & Hamilton, 2011; Wiklund & Shepherd, 2003a). In contrast, Brüderl and Preisdörfer (2000) argue that growth as an entrepreneur's ambition is not the only significant factor, and growth would not happen merely through an entrepreneur's personal and psychological aspirations. They explain that growth is a combination of internal and external factors and there is no unique theory of growth. An entrepreneur needs to bring social and intellectual capital into the organisation and both external and internal conditions are important. They also note that entrepreneurs with moderate aspiration may start a new firm and when they find new opportunities with significant profit, may change their minds and pursue faster growth.

As the above discussion shows, growth has been researched from multiple perspectives, but to answer the question as to why firms grow, scholars need to view growth as a process. The literature shows that a firm's growth is highly dependent upon internal and external resources. OC theory presents a different point of view and considers optimism and chance to be the main

factors in growth. However, this theory has received some criticism. In OC theory, chance leads to more benefits, and optimism drives entrepreneurs to stay in business. Entrepreneurs stay in business as long as they have access to resources. Other studies suggest that growth is random, dependent on chance, while others show this is not the case. Overall, although growth has been addressed by many studies with promising findings, there is still much that needs to be understood, especially around the process of growth.

2.3.1 Fast Growing Firms

The concept of fast growth is sometimes ambiguous. The term “fast growth” and “high growth” in some studies are used interchangeably but they convey different meanings (Cooney & Malinen, 2004). “‘fast-growth’ implies growth overtime and measurement of speed, whereas ‘high-growth’ alludes to quantity” (Cooney & Malinen, 2004, p. 4). There is no consensus on the definition or measurement of fast growth, but various measures have been developed in different studies (Achtenhagen, Naldi, & Melin, 2010; Coad et al., 2014; Delmar & Davidsson, 1998). Some scholars, like Littunen and Niittykangas (2010), define fast growth and its measurement as doubling turnover during a specific period with a pre-defined minimum sales turnover. Storey (1996) applied other criteria to define a fast-growth firm. He suggested that firms with a 30% compound turnover each year for the past four financial years could be considered fast-growth firms. In addition, he applied a specific current turnover amount for those firms that had the acceptable turnover rate to avoid selecting imprecise samples for the study. Other scholars like Birch (1987) used employee expansion as a measure for fast-growth firms. He defined firms ranking in the top 5% as fast-growth firms. Brüderl and Preisendörfer (2000) considered doubling employment, plus creating five jobs within the first four years to be a fast-growth rate. In their

study, only a small percentage of small new firms are considered fast growth. Furthermore, in another study in the US, achieving a compound three-year growth with a growth rate of 80% or more in each year was considered a fast-growth index, and a growth rate of 35% or less in each year was the threshold for being considered a slow-growth firm (Barringer et al., 2005).

Fast growth is the result of various elements and practices. Littunen and Niittykangas (2010) investigated 200 metal base manufacturers in Finland over a period of eight years. They divided these firms into two different age groups: 1–4 years and 4–8 years. Their findings showed the impact of entrepreneurs' "know-how" on firm growth in the first four years. The external network of entrepreneurs (i.e. business networks) had a clear connection to growth, while the internal network was more consequential in the second four years. These results indicate that market and industry environments are significant factors in creating new opportunities for growth. In contrast, Brown, Earle, and Lup (2005), examined 297 small enterprises in Romania and found that entrepreneurial skill does not have a significant effect on fast growth. Instead, external credit and resources lead to growth. Hinton and Hamilton (2013) found four dimensions of high growth: founders' characteristics, opportunity orientation, opportunity exploitation, and the management of growth. Their findings about New Zealand high-growth firms indicate that entrepreneurs build a pro-growth culture in their firms and exploit opportunities by their characteristics and opportunism. A study by Glancey (1998) found that growth is also a function of location, industry and profitability. The study showed that younger firms experience a higher rate of growth than older firms. Other scholars have not agreed upon what factors really affect fast growth and point out that the literature is very fragmented in this area (Delmar, 1997; Wiklund, 1998).

In contrast, Barringer et al. (2005), reviewed 106 articles and books, showing that the literature is rich and covers four main dimensions. Their findings suggest that founder characteristics, firm attributes, business practices, and human-resource management have major effects on fast growth. Detailed analysis demonstrated that some of the main factors for fast growth included an entrepreneur's relevant experience, education and previous entrepreneurial career alongside the existence of a clear mission and commitment to growth are some of the main factors for fast growth. Additionally, proper knowledge about customers and creating value for them accelerates market acceptance of the firm.

By combining Barringer et al. (2005) and Wiklund's (1998) conceptual model, other scholars developed a new model showing what influences fast growth (Y. Zhang et al., 2008). This model proposes that environment, firm resources, entrepreneurial attributes and entrepreneurial strategies are the main influencers of fast growth. This new framework differentiates fast-growth from slow-growth firms. In this quantitative and comparative study, 30 fast-growth and 30 slow-growth firms were selected from a financial database from 2001 to 2003. This study found that an entrepreneur's previous experience significantly affected fast growth while higher education did not. They also found fast-growth firms were more innovative and had a higher growth-oriented vision. The operating environment was also found to be an important element and was different between the two groups; fast-growth firms conducted business in a very dynamic, hostile and heterogeneous environment, when changes were extremely rapid and unpredictable. Another study found that a firm's capabilities in terms of marketing, finance, and innovation were attributes that assisted firms in achieving fast growth (Barbero, Casillas, & Feldman, 2011). In a similar vein, by investigating technology-based firms in New Zealand and Malaysia, Ng (2013) suggested that five capabilities – innovation, financial, human, marketing,

and organisational – play role in fast growth. This research showed that internal human resource, networks, and ability of entrepreneurs to manage the resources of the firm are important elements of high growth. Another study showed that high-quality strategies that focus on the high quality of products and services, and benefits strategies that focus on offering low-cost products are common practices that firms choose to gain a competitive advantage (Upton, Teal, & Felan, 2001). Upton et al. (2001) also found that planned strategies, involvement of board of directors in goal setting, and sharing information with staff are other practices that lead to fast growth.

To sum up, the existing literature that investigates how entrepreneurial firms or small businesses grow as well as how they manage to grow rapidly, revolves around four main important elements of entrepreneurial firms: entrepreneur's characteristics, firm attributes, culture and resources, industry and environment, and the existence of a strategy or willingness to grow. These all appear to be important elements for fast growth. Therefore, it is up to what lens the researcher is looking through. Table 2.1 illustrates the areas some studies have covered.

Some scholars, like Coad et al.(2014) Dobbs and Hamilton (2007) and Brüderl and Preisdörfer (2000), believe that there is no integrative and unique theory that can explain fast growth. Brüderl and Preisdörfer (2000) conclude:

Now, even though there is a long tradition of research dealing with the growth potential of new firms in general *we do not have theories tailored to explain rapid growth*. An extreme position could be that *fast growing is simply a matter of luck or chance*. All the time many different people initiate new businesses, and it could be argued that *more or less by accident some people stumble upon unpredictable market niches and their firms expand rapidly*. (pp. 6, emphasis added)

Table 2.1. The coverage of growth and fast growth studies in entrepreneurship and small business

Author(s)	Entrepreneur	Firm	Environment	Strategy/ Willingness to Grow
Penrose (1960, 1995)	√	√	-	√
Sandberg (1986)	√	-	√	√
Sandberg and Hofer (1988)	√	-	√	√
Fombrun and Wally (1989)	-	√	√	√
Davidsson (1991)	√	-	√	√
Coviello (1995)	√	-	-	-
Storey and Wynarczyk (1996)	√	-	√	√
Jenkins and Johnson (1997)	√	-	√	√
Glancey (1998)	-	-	√	√
Wiklund (1998)	√	√	√	√
Ennis (1999)	√	-	-	-
Hite and Hesterly (2001)	√	√	-	-
Baum, Locke and Smith (2001)	√	√	√	√
Upton et al (2001)	√	√	-	√
Almus (2002)	-	√	√	-
Wiklund and Shepherd (2003a)	√	√	√	√
Blackman (2004)	√	-	-	√
Barringer et al (2005)	√	√	√	√
D. Brown et al (2005)	√	√	√	-
Garnsey and Hefferman (2005)	-	√	√	-
Gilbert, McDougall, and Audretsch (2006)	√	√	√	√
Moreno and Casillas (2007)	-	√	-	-
Y. Zhang et al (2008)	√	√	√	√
Moreno and Casillas (2008)	-	√	√	√
Littunen and Niittykangas (2010)	√	√	√	√
Hansen and Hamilton (2011)	√	√	√	√
Storey (2011)	√	√	-	√
Eckhardt and Shane (2011)	-	√	√	-
Islam, Aktaruzzaman Khan, Obaidullah, and Syed Alam (2011)	√	√	-	-
Barbero et al (2011)	√	√	-	√
Hulbert, Gilmore, and Carson (2012)	√	-	-	√
Lopez-Garcia and Puente (2012)	-	√	√	-
Ng (2013)	-	√	-	-
Hinton and Hamilton (2013)	√	-	-	√

Considering the suggestion that fast growth could be a result of luck or chance, this study aims to investigate fast-growth firms from a new perspective by investigating the entrepreneur's serendipitous opportunity exploration (through luck, chance, etc.) and its influence on fast growth.

As reviewing the existing literature has shown, the role that serendipity (accidental opportunity exploration) plays in fast growth has not been empirically researched. Although some papers indicate that chance may affect growth conceptually (Coad et al., 2012), or play a role in helping entrepreneurial firms to achieve success (Storey, 2011), there is still a gap in the literature regarding *how* chance plays a role in growth – especially the fast growth – of firms.

A few scholars have noticed during their research that an entrepreneur's accidental discovery and exploration of opportunities, through luck or chance, may play a role in firm growth, but still there is no comprehensive study covering the specific role of serendipity in fast growth. For instance, Ennis (1999), Wanger (1992), and Meyer and Skak (2002) found that good fortune and luck exist and might play a role in growth of the firm. Two other studies show that being lucky with access to resources may create competitive advantages for firms and lead to success (Barney, 1986; Ma, 2002).

Figure 2.1 demonstrates the opportunity for this study and shows how the study positions itself. Therefore, the role of serendipity in fast-growth firms encompasses the first part of the study.

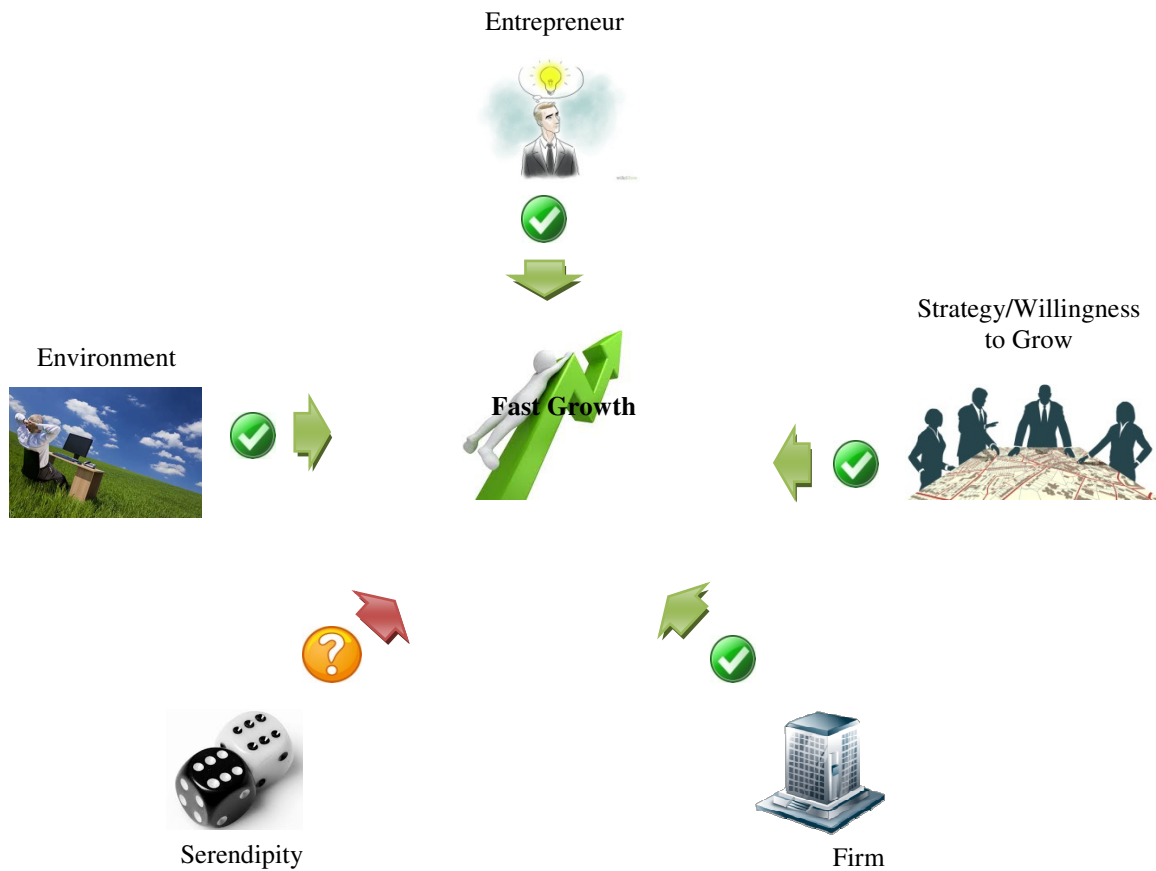


Figure 2.1. The gap in the literature and opportunity for this study

The other gap in the literature is a lack of research into the interrelationship between effectuation reasoning of entrepreneurs to exploit new opportunities and fast growth. Since effectuation is a new area of research in entrepreneurship, there is not much in the literature to investigate the relationship between the logic and growth of the firm. Read et al. (2008) conducted a deductive study through a meta-analysis of studies from 1996 to 2007, demonstrating that there is a significant relationship between effectuation elements of entrepreneurs' decision-making and firm performance in terms of ROI, sales growth and revenue growth. Although the relationship between growth and effectuation is not clear in this study, the

findings confirm the positive effect of effectuation on firms' overall performance. Effectuation also influences decision-making in marketing practices of firms (Hultman & Hills, 2011; Whalen & Holloway, 2012) and scholars argue that it is effectuate in entrepreneurial firms (Hills & Hultman, 2011a; Lam & Harker, 2013). Thus we postulate effectuation and entrepreneurial marketing (EM) in this study as an instrument that enables entrepreneurs to exploit new opportunities entrepreneurially, relying on available means. Although the relationship between EM and growth has already been investigated, mainly in large firms and rarely in small firms (e.g. Kara, Spillan, & DeShields, 2005; Moreno & Casillas, 2008; Rauch, Wiklund, Lumpkin, & Frese, 2009), the combination of effectuation and EM needs more research.

Therefore, the second part of this study revolves around the role of entrepreneurs' effectual reasoning and entrepreneurial marketing strategy to exploit new opportunities to achieve fast growth. The research seeks to scrutinise the interrelationship of three main constructs—serendipity, effectuation and EM—and their contribution to fast growth. In the following sections, the role of accidental discoveries in serendipity is conceptualised and how serendipity affects opportunity exploration is discussed, as well as how it contributes to fast growth. Following this, how entrepreneurs exploit new opportunities by effectuation logic and entrepreneurial marketing is investigated, as well as how these constructs affect fast growth.

2.4 The Concept of Serendipity

If you have the opportunity to choose between smart and lucky, choose lucky. (Stoskopf, 2005, p. 332)

Oxford Dictionaries Online defines serendipity as “the occurrence and development of events by chance in a happy or beneficial way,” for example, finding something interesting when

you are searching for something else or being in the right place at the right time. The etymology of serendipity goes back to 1754, when Horace Walpole (1717-1797), an English art historian, coined the word serendipity for the first time in a letter to Sir Horace (Horatio) Mann (Merton & Barber, 2004; Van Andel, 1994). He formed it from a Persian tale, “The Three Princes of Serendip,” which was written by Amir Khusrow Dehlavi (1253-1325), an Indian-Persian poet. Dehlavi quotes in the poem “Hasht Behesht,” or, “Eight Paradises,” that the heroes of his legend discover something they were not looking for by accident and sagacity (Van Andel, 1994) . Serendip is the former name of Ceylon, now Sri Lanka, which in Persian means “Dwelling Place of Island’s Lions”(Moeen, 2006). From there, serendipity entered the English language to describe *fortunate accidental discoveries* (Friedel, 2001).

2.4.1 Serendipity vs. Luck

People often think serendipity is just chance, luck, or good incident, but some scholars argue otherwise. When one equates serendipity with pure luck, the roles of wisdom, innovation and creation, and particular abilities that humans possess are ignored (Friedel, 2001). Studies show that serendipity is different from luck or chance. For instance, Friedel (2001) argues that the first definition of serendipity describes it as “accident and sagacity” and it is not simply referred to as “happy accidents.” Therefore, finding something that occurs by accident and chance is not serendipity, because it needs mental capacity to recognise unusual things, which could go beyond the obvious matters. In this vein, Van Andel (1994) postulates that serendipity could not happen if one’s mind is not ready to capture something, arguing that chance likes prepared minds. To go further, Merton and Barber (2004) define serendipity as deduction after an accidental observation. In short, scholars argue that serendipity is not just pure luck and words such as

sagacity, knowledge, deduction, and experience are often associated with it, showing how one can explore a serendipitous situation.

In conclusion, scholars do not believe that serendipity exists without a prepared mind and individual preparation. They argue that pure luck or chance is not equal to serendipity. In order to occur, serendipity requires some readiness, preparation, and planning. Therefore, this study conceptualises serendipity as a sequence of luck, chance, fate, fortune, and good or bad incident, followed by sagacity, wisdom, knowledge, and experience of entrepreneurs that lead them to explore new opportunities.

2.4.2 Serendipity in Science, Innovation, and Information-seeking

Although serendipity is not a well-researched subject in many fields, there are studies about the role of serendipity in science, innovation, and information-seeking. These studies show that serendipity is an inevitable phenomenon that cannot be ignored. Furthermore, scholars argue that preparation might accelerate the occurrence of serendipity. Therefore, in line with the previous discussion, serendipity in these studies is a combination of luck, chance, knowledge, and preparation.

The history of some scientific discoveries demonstrates that the impact of serendipity is outstanding. Friedel (2001, p. 36) says that "... accidental discovery or invention is a common and widely acknowledged fact in modern science and technology." For example, the discoveries of penicillin by Fleming, fullerenes by Harold Kroto, X-ray by Röntgen (which brought them Nobel prizes in 1945, 1996 and 1901, respectively) and vaccination against smallpox by Jenner in 1796 are some of the best known accidental discoveries. Vulcanisation of rubber by Goodyear in 1839, the volume of irregular solids by Archimedes, or gravity by Isaac Newton are other

examples of serendipitous discoveries (Friedel, 2001; Merton & Barber, 2004; Roberts, 1989; Stoskopf, 2005). It should be emphasised again that serendipity needs a prepared mind. To show the importance of mind readiness, Compere (cited in Roberts, 1989, p. 20), on the Jenner's discovery of vaccine, states that "[h]e [Edward Jenner] had the good judgment to recognize its value and to make use of it."

Like in science, serendipity could also potentially occur in the innovation process, which is a key factor in the success of any organisation. Natarajan (2000) argues that innovation is a planned procedure, but innovators cannot ignore the role of serendipity during their phase of inspiration. Although he concedes that serendipity cannot be planned, the environment of innovation in organisations is a catalyst to encourage serendipity to happen. Corporate culture and rewards systems must encourage employees to be more innovative, and this will lead them to seize serendipity.

Research has shown that information-seeking can be influenced by serendipity as well. Serendipity can be seen more in information-seeking and retrieval than in other areas (Foster & Ford, 2003; McBirnie, 2008; Toms, 2000). Toms (2000) confirms that people find required information sometimes by accident, incident, or serendipity, often in combination with other information-seeking principles. Foster and Ford's (2003) findings show that serendipity is largely experienced among researchers and is related to the impact of new information in research. This further confirms the notion that serendipity relates to chance encountered with a prepared mind (Van Andel, 1994).

Serendipity is not limited to science. Van Andel (1994) has collected more than a thousand examples of serendipity and classified them into four areas: science, technology, art,

and daily life. As discussed elsewhere, serendipity in science and technology deals with accidental discoveries of phenomena and inventions of new things. In art, serendipity can be found in the creation of new style, which is strongly related to the artist who created it. Picasso's Blue Period is an example of serendipity in the creation of style. One day he just had blue colour and started painting with that. He liked the style of the blue and created outstanding paintings between 1901 and 1904. Finally, serendipity happens in daily life. Any person can encounter serendipity and it is up to them whether they chose to act on the event or not. Any person with a prepared mind can benefit from caring about serendipity.

2.4.3 Serendipity in Management and Marketing

There is a small number of studies that investigated the role of serendipity in management and marketing. Ma (2002) defines serendipity as a precedent of luck and conceptualises it in terms of competitive advantage of firms. He notes companies can leverage the role of luck in their competitive advantage through the benefits of internal and external changes. Luck could be endogenous or exogenous and firms could act passively or proactively. Passive action of a firm is when, the firm is waiting for luck and proactive action of the firm is when it is looking for luck. In his proposed framework, *pure luck* is the result of a firm's internal and external environment and serendipitous events. In contrast, *prepared luck* is the consequence of the firm's proactive strategy toward external environment occurrences. One of the recent studies conducted by Vasilchenko and Morrish (2011) investigated the role of networks in the exploration and exploitation of opportunities in the internationalisation process of technology firms. The findings show that social networks can be triggered by serendipitous encounters, which may lead to exploration of opportunities. These serendipitous encounters (such as holiday encounters) is

contrary to planned action, rational process, and systematic information-seeking and leads entrepreneurs to explore new opportunities to enter international markets. This finding is consistent with Merrilees, Miller and Tiessen's (1998) study on the process of internationalisation of small firms concluding that some firms leverage a different mechanism rather than planned strategies. Their findings show that serendipity in terms of networking and chance encounters assist entrepreneurs to recognise emerging opportunities, but they have to be quick in responding to them by leveraging their resources. This supports Meyer and Skak's (2002) study on internationalisation of firms in Europe, which suggests that internationalisation is sometimes highly dependent on serendipitous encounters through networks. They note that:

As events in the network are generally beyond the control of smaller firms, their strategies are subject to high degrees of serendipity, i.e. fortunate and unexpected discoveries made by chance. The ability to react to chance events in the network thus can be critical for their survival and growth. (Meyer & Skak, 2002, p. 179)

The history of some companies like Nike, Apple, Harley Davidson, Procter & Gamble, and McDonald's shows that chance, accidental occurrences, and sheer good fortune play a significant role in their business life (S. Brown, 2005). In his conceptual paper, Brown also emphasises the role of chance in marketing and argues that those that believe in chance or luck will get it and there is a need to see beyond the planned marketing program. He strongly proposes that serendipity may explain what we do not yet understand and argues that "perhaps it's time to abandon our fixation with customer focus and start taking serendipity seriously"(p. 1233).

2.4.4 Serendipity in Entrepreneurship

The role of serendipity, especially in the exploration of opportunity, is well-discussed in a conceptual study by Dew (2009), where he defines serendipity as a search leading to unintended

discovery. He writes, “entrepreneurship is a series of random collisions” (p. 735) and suggests that serendipity plays a significant role in entrepreneurship. Although serendipity seems to occur accidentally, he proposes a framework of serendipitous opportunity discovery. This framework consists of three conceptual building blocks that can facilitate serendipitous discovery, namely the domains of “prior knowledge,” “search,” and “contingency.” When an entrepreneur is searching through these three fields, serendipity may happen, and if they can seize the moment, it may lead to great opportunities. Figure 2.2 illustrates Dew’s domain of opportunity discovery in entrepreneurship.

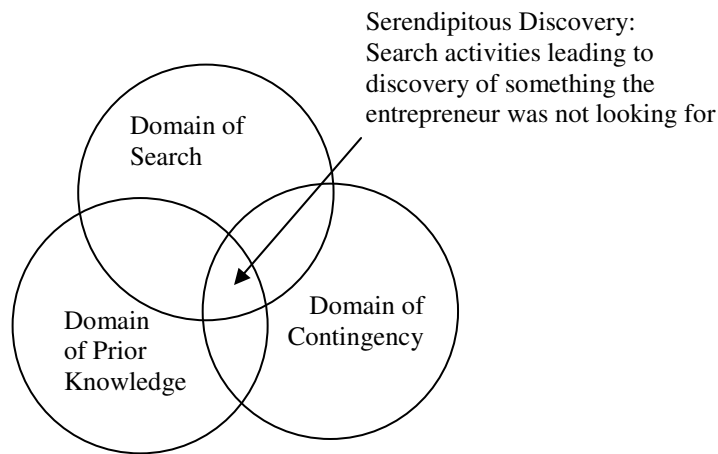


Figure 2.2. Domain of Opportunity Discovery

Source: Dew (2009)

The “domain of opportunity discovery,” as suggested by Dew (2009), is based on prior research on opportunity exploration in entrepreneurship literature. This model helps scholars and entrepreneurs to understand the source of serendipity in a context that is more approachable. The source of serendipity in this model is the area where the three domains come together, forming an area in which serendipity may happen. Briefly, serendipity revolves around the interaction of three elements: knowledge (sagacity), search (activity), and a contingency (event). The

framework demonstrates these three elements and relates them to different types of opportunity recognition.

The first element of Dew's framework is prior knowledge. Prior knowledge is an accumulation of information, which is generated through the special experience of each person (Shane, 2000). Shane argues that entrepreneurs discover opportunities related to their previous knowledge. Entrepreneurs' prior knowledge will influence their decisions to enter a new market and their knowledge about customers will affect their endeavours to discover new products and services.

The entrepreneurs' marketing knowledge and intelligence, educational background, and experience are some of the important elements in exploring an opportunity (Carson & Gilmore, 2000a; Shane, 2000). Prior knowledge can also be considered as the intellectual capital of entrepreneurs that can assist in exploring opportunities. Ulrich (1997) defines intellectual capital as "competence multiplied by commitment." Based on Ulrich's definition, Harris (2000, p. 23) considers intellectual capital to be the "knowledge, skills, and attributes of everyone within an organisation multiplied by the person's willingness to work hard." Edvinsson and Malone (1997, p. 44) expand this idea and define intellectual capital as "the possession of the knowledge, applied experience, organisational technology, customer relationship and professional skills, that provide a competitive advantage in the marketplace." They suggest that intellectual capital could be a viable alternative for building a competitive advantage in today's market and it is therefore worthy of further investigation. Accordingly, prior knowledge and experience of the market could differentiate entrepreneurs from ordinary people, and it could be an element in seizing serendipity to explore a new opportunity.

Search is the second domain of opportunity recognition in Dew's framework. Search is the activity of purposefully looking for something. In his study about serendipity in scientific discoveries, Stoskopf (2005) strongly stresses the role of search and experience to find things others cannot. He indicates that one must be able to know and identify what is sought and what is unusual. On the other hand, Shane (2000) proposes that entrepreneurs will discover entrepreneurial opportunities without actively searching for them. His argument is based on Austrian economists' school of thought, arguing that individuals cannot search for opportunities because opportunities are unknown and one cannot search for something that does not exist (Kirzner, 1973). In conclusion, it can be argued that search activity could occur with or without knowledge about the object of the search. Playful search is an example of search with no knowledge.

The third domain in Dew's framework is contingency. "Contingency can be defined as events that are not logically necessary, i.e. could not have occurred" (Dew, 2009, p. 739). In other words, contingency may happen by pure chance without a known source. In the framework introduced by Dew (2009) (Figure 2.2), contingency refers to the environment effect in entrepreneurship, and it is an exogenous element of opportunity discoveries. Contingency could be seen in business histories. For example, happy or bad events can obviously be seen in the history of successful companies (S. Brown, 2005) and there is no account on the source of those events.

Serendipity, in Dew's framework, captures the three concepts of search, knowledge, and contingency. As Dew (2009) argues, serendipity is associated with all three domains. Lack of each element excludes opportunity exploration from being serendipitous and leads entrepreneurs

to find an opportunity in other paradigms. Then, it can be observed that serendipity relates to finding opportunities through knowledge and in the context of search, even if it is unknown to entrepreneurs, and it is followed by events that shape serendipity to explore an opportunity.

2.4.5 Patterns of Serendipity

Serendipity by nature is not manageable, but the handful of available studies suggests there are some patterns of serendipity. Friedel (2001) categorises three distinctive patterns of serendipity in science, which are characterised by their historical background, going back to famous and often humorous stories about discoveries in science, which are pure instances of serendipity.

- **Archimedean Serendipity**

Archimedean serendipity is the first type, which is a common pattern in scientific discoveries. It recalls Archimedes' effort to solve the mystery of measuring the volume of irregular solids. He was getting into a bath when he found that water displaced as a result of getting into it, and thus found how to measure the volume. Put simply, Archimedean serendipity applies to a situation where one is *looking for something, and they accidentally find it*.

- **Columbian Serendipity**

Columbian serendipity goes back to Christopher Columbus' arrival in America. This pattern implies *finding something when you are looking for something else*. When Columbus and his crew reached America, they thought that they had found a new route to India, but found something else instead. Columbian discoveries are known as frequent accidental discoveries in science.

- **Galilean Serendipity**

When Galileo watched the sky through his spyglass, he detected mountains on the moon surface and observed four moons around Jupiter that were not sought by him. The role of sagacity here is more significant than with the other patterns. This pattern of serendipity is less known. What Galileo found was beyond his expectations. Galilean serendipity is not exactly accidental, but *one can find something unsought because of their sagacity*.

These patterns have some simple differences. The difference between Columbian and Archimedean serendipity is the subject of the search. In Archimedean pattern, A is searched and found by accident. In Columbian pattern, A is searched and B is found. The third pattern is different from the first two. In the Galilean pattern, the researcher encounters an issue that is not sought. The knowledge, cleverness, and sagacity of the researcher are the keys to finding something by serendipity.

These three patterns of serendipity can be categorised in two distinctive groups. Robert (1989) has presented two classifications, “serendipity” and “pseudoserendipity,” to describe fortunate events. In this categorisation, serendipity refers to finding sought things, while pseudoserendipity refers to discovering unsought things by any type of accident. Applying these classifications to previous serendipity patterns shows that Archimedean and Columbian serendipities can be classified as pseudoserendipity and Galilean serendipity can be placed in the serendipity group (see Table 2.2).

The main difference between these two forms of serendipity is the role of “articulation of errors,” or making mistakes and trial and error (Díaz de Chumaceiro, 1995, 2004; García, 2009; Roberts, 1989). “Articulation of errors” plays a role in pseudoserendipity and leads to new

directions to solve a problem. It may accelerate the occurrence of serendipity, especially in the domain of science. Table 2.2 illustrates the application of the two categories of serendipity to the three patterns of serendipity.

Table 2.2. Serendipity and Pseudoserendipity

Patterns of Serendipity	
Pseudoserendipity (sought for)	Archimedean and Columbian
Serendipity (unsought for)	Galilean

Source: Adopted from Diaz de Chumaceiro (1995, 2004), Friedel (2001), Roberts (1989)

2.4.6 Control of Serendipity

Although the nature of serendipity is unpredictable, it is controllable in some aspects. The literature on serendipity so far emphasises the possibility of serendipity without the aspect of control. To describe the controllable aspect of serendipity, McBirnie (2008) uses the duality of process-perception in his research on information-seeking. Process, as he defines, is “the doing” and perception is “the trying to observe” (McBirnie, 2008, p. 608). He suggests that the process of serendipity is not controllable and one cannot control a process that is highly linked to chance and unexpected events; however, one can control the process of serendipity, which is highly linked to intention, wisdom, and attitudes of individual. The study further suggests that perception of an individual during information-seeking plays a key role in serendipity. Thus, perception could to some degree be a matter of control, but that is up to the person who is exposed to serendipity.

In contrast, Figueiredo and Campo (2001) do not believe that serendipity is controllable and the best way to deal with it is to be prepared for events and have an interest in being lucky and seizing accidental opportunities (Stoskopf, 2005; Toms, 2000; Van Andel, 1994). Other scholars also argue that despite our inability to control unexpected opportunities, “we should be able to improve our ability to search for unexpected opportunities and seize them, namely through the exploration of analogies and the participation in networks” (Martinet and Marti (1995) cited by Figueiredo & Campo, 2001, p. 2). As they point out, networks are one of the best channels people could use to control and create serendipity for themselves. This is in line with the research in entrepreneurship and its emphasis on being part of a network, which is the social capital of entrepreneurs.

Much of the research on entrepreneurs’ networks is based on social capital theory. Bourdieu (1985, p. 249) defines social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition.” Social capital is the sociological concept of establishing connection within and between social networks. Portes (1998, p. 2) believes that “involvement and participation in groups can have positive consequences for the individual.” As seen in the literature, a number of studies confirm the relationship between an entrepreneur’s network and firm success (Coviello & Cox, 2006; Coviello & Munro, 1997; Hite & Hesterly, 2001). Based on the possibility of serendipity control, this might make or accelerate serendipity for entrepreneurs to create and seize valuable opportunities in establishing a firm or launching new products.

2.4.7 Formulation of Serendipity

Figueiredo and Campo (2001) developed equations for serendipitous events. Three groups of equations were proposed to explain how serendipity occurs. The first equation describes Archimedean serendipity. When an individual tries to solve a problem (P_1), with a defined and previous knowledge domain (KP_1), and an accident (KM) occurs (which the authors termed an unexpected or inspiring metaphor), this metaphor can then inspire them to find a solution (S_1) and create new knowledge (KN) around the problem. The resulting equation is as follows:

$$\begin{array}{l} P_1 \subset (KP_1) \\ M \subset (KM) \end{array} \implies S_1 \subset (KP_1, KM, KN)$$

P_1 : Problem
 KP_1 : previous knowledge domain
 M : Unexpected or inspiring Metaphor
 KM : An accident
 S_1 : New solution
 KN : New knowledge
 \subset : Subset

In light of this equation, let us recall Archimedean serendipity. When Archimedes was seeking a solution to measure the volume of gold (P_1), he encountered an unexpected metaphor (M) in a tub. The water was overflowing in his bath, and he discovered a solution (S_1) for the problem. Eventually, he discovered a new method (KN) as new knowledge to measure the volume of solids.

The second equation relates to Colombian serendipity. When individuals look for solutions to a problem (P_1) with their available knowledge, and an unexpected metaphor leads them to a new problem (P_2), they can find a solution to the new problem. The story of discovering X-ray could be classified in this model. While Röntgen was attempting to solve a problem of cathode ray (P_1, KP_1), he found that a light was shining in the dark; the light was from

a fluorescent tube that coincidentally was in the lab. This was an unexpected metaphor (M). He tried to remove the lighting and placed cardboard over it to block the light. To his surprise, he saw the light penetrated through the cardboard. He put his hand in front of the light and found that the light could penetrate through his hand and he could see his bones on the wall (P₂, KP₂). Consequently, he discovered the most applicable instrument in medical science (S₂, KN). Hence, the formulation of this kind of serendipity is as:

$$\begin{array}{l} P_1 \subset (KP_1) \\ P_2 \subset (KP_2) \end{array} \quad \Rightarrow \quad S_2 \subset (KP_2, KN)$$

P₁: Problem
 KP₁: Previous knowledge domain
 P₂: New problem
 KP₂: New knowledge
 S₂: New solution
 KN: New knowledge
 ⊂: Subset

The third equation is similar to the second one but includes errors and mistakes in serendipity occurrence. When Columbus tried to find a new route to India (P₁) with the knowledge of navigation he had at the time (KP₁), he underestimated the circumference of the earth, and one could say he had incorrect knowledge (EP₁). Therefore, he arrived in a place that was not sought (S₂). Hence the equation is:

$$\begin{array}{l} P_1 \subset (KP_1, EP_1) \\ P_2 \subset (KP_2) \end{array} \quad \Rightarrow \quad S_2 \subset (KP_2, KN)$$

P₁: Problem
 KP₁: Previous knowledge domain
 EP₁: Incorrect knowledge
 KP₂: New knowledge domain
 S₂: New solution
 KN: New knowledge
 ⊂: Subset

In conclusion, serendipity in entrepreneurship is an accident (luck, chance, etc.) followed by the sagacity of an entrepreneur to explore new opportunities. Reviewing the existing literature

shows a gap in understanding the effect of serendipity in entrepreneurship. As conceptual models demonstrate, serendipity may lead to exploration of desired or undesired opportunities and entrepreneurs can expose themselves to serendipity by expanding their networks and somehow control the serendipity by increasing their knowledge and experience. There is also very little in the literature on the effect of serendipity on growth let alone fast growth. Some conceptual studies suggest that serendipity may play a role in growth of firms while other works found that growth might occur because of a lucky situation. Therefore, this study aims to investigate the role of serendipity in fast growing firms in terms of exploring new opportunities, and find how this contributes to the growth of firms. To do this, it is necessary to have a better understanding of opportunity exploration. The next section examines the literature on opportunity exploration in entrepreneurship.

2.4.8 Opportunity Exploration and Sources in Entrepreneurship

The definition of entrepreneur has evolved over many years. Entrepreneur was first defined by Savary in 1723 (as cited by Smith, 1967), as a person whose activity is buying goods for a fixed price and selling them at a higher price. Entrepreneur definitions in early literature were centred around creating and gathering resources to produce new goods, services, and businesses. For example, Schumpeter (1943) defines an entrepreneur as a person who creates new goods and services, whereas Smith (1967) defines it as a person who gathers together essential resources to create a business. Later, entrepreneurship was considered in an economic view. According to Bygrave and Hofer (1991), an entrepreneur is a person who creates a firm for profit. More recently, the definition has changed to take into account the concept of opportunity

exploration and defines entrepreneurs as individuals who recognise and explore opportunities (Gilmore, 2011; Shane & Venkataraman, 2000).

Today, opportunity is in the heart of entrepreneurship and entrepreneurs are known for exploring opportunities. In his definition about the notion of entrepreneurship, Witt (2007) implies that opportunity recognition and exploration is the first stage of entrepreneurship. This significant shift from early definition to one that considers opportunity discovery clearly demonstrates the importance of “opportunity” as a distinctive issue in entrepreneurship and highlights opportunity exploration as a substantial framework of entrepreneurship.

An issue of contention in opportunity exploration arises in the sources of new opportunities. According to traditional marketing principles, new opportunities emerge from traditional marketing research, but in entrepreneurship, the process is much more complicated than traditional marketing (Hultman & Hills, 2011). Shane and Venkataraman (2000) explain that entrepreneurial opportunities exist because of the different beliefs and information people hold that enable them to see and realise opportunity and information asymmetries in the market.

Marketplaces and networks are two other main sources of new opportunities, which are discovered using an entrepreneur’s alertness, knowledge, and experience (Hulbert et al., 2012). Opportunity arises from identifying a problem and finding a solution in the context of goods, services and an available market. It is related to deliberate search and exploring solutions. Opportunity exploration is about the ability to manage and govern the process of seeking high-value solutions and commercialisation choices (Hsieh, Nickerson, & Zenger, 2007). Somewhat contrary to this school of thought, Ardishvili and Cardoz (2000) found that opportunities are created through entrepreneurs’ recognitions rather than goal-oriented searches. They argue that

entrepreneurs find their opportunities accidentally, and social networks assist entrepreneurs in recognising opportunities. Thus, recognition is the combination of entrepreneurial awareness, access to social networks, and prior knowledge of the market and its customers. They suggest that successful recognition of an opportunity is related to alertness of entrepreneurs, and prior knowledge and experience of the market assists them to find certain opportunities.

Arenius and Clercq (2005) found that education had a positive impact on opportunity recognition, implying that those who are more educated are more likely to recognise opportunities that exist. In line with this finding, Sardeshmukh and Smith-Nelson (2011) argue that opportunity is recognised as a result of information inconsistency in the external environment and entrepreneurs who have the appropriate knowledge and relevant experience are more likely to recognise new opportunities better than others.

Gaglio and Katz (2001) add that opportunity exploration is a kind of behaviour that entrepreneurs display through their alertness. They redefine entrepreneurial alertness (Kirzner, 1973) as a distinctive ability to notice changes in the environment and the ability to formulate and imagine the future. The alertness of an entrepreneur enables them to understand the market environment and identify the real dynamics of the market. Gaglio and Katz (2001) argue that an alert person, in contrast to a non-alert person, can identify relationships in the market and use them to explore new opportunities. Moreover, they have mapped out the process of alertness and opportunity discovery and note that alert entrepreneurs are very sensitive to unusual things happening around them. Using counterfactual thinking and mental simulation, they can break the existing means-end framework and build new innovative opportunities.

The studies discussed above show that networks, marketplace, different beliefs and information, and sometimes accidents are some sources of new opportunities and exploration is enhanced by the ability of the entrepreneurs' involvement in networks, knowledge and experience. The literature does not, however, cover the effect of unpredictable incidents on opportunity exploration empirically, with the exception of a comment from Shane and Venkataraman (2000) that views luck as a null hypothesis in their study. Another perspective is that some entrepreneurs believe opportunity will appear at the right time; however, their previous experience and social networks drive them to look for the right opportunity (Lam & Harker, 2013). Summarising the reviewed literature shows that there is no specific study on the relationship between opportunity exploration and serendipity. Therefore, this study will have a look at the role of serendipity in opportunity exploration and recognition and the effect of those discovered opportunities on the growth of the firm.

2.5 Effectuation Logic

Several successful businesses and even great companies have begun without any conscious initial intention on the part of the founders... [T]he Curry in a Hurry entrepreneur's journey of effectuation might also be the result of any one of a wide variety of serendipitous event. (Sarasvathy, 2001, p. 247)

Effectuation reasoning refers to an entrepreneur's thinking and decision-making process to start and continue a new business, opportunity, market, product or a business (Dew, Read, Sarasvathy, & Wiltbank, 2009; Read & Sarasvathy, 2005; Sarasvathy, 2001). The process of decision-making and selecting the best choices is widely discussed in the literature on four levels: the individual, the firm, the industry/market, and the economy (Sarasvathy, 2001). As Sarasvathy (2001) argues, all entrepreneurs face serious challenges when they want to create a new firm or

new market. Generally, there are two approaches, “Causation” and “Effectuation,” which are broadly discussed and differentiated by Sarasvathy (2001):

Causation processes take a particular effect as given and focus on selecting between means to create that effect.

Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means. (2001, p. 245)

In effectuative thinking, humans design artefacts, products, firms and markets (Sarasvathy, 2003; Sarasvathy et al., 2008). Managers first try to analyse the environment in a causal manner, while in an effectual manner, entrepreneurs try to discover new opportunities and leverage their means to exploit them (Sarasvathy, 2001; Shane & Venkataraman, 2000).

Using an example can help illustrate effectuation so it is better understood. Let us suppose that an entrepreneur sets goals for his firm, for example, X% net profit in each year, \$X in sales in the first year, X% sales growth per annum, and so on. This entrepreneur has some *pre-set effects*, and will try to put together the resources to achieve these specific goals. This is similar to a chef who tries to cook according to a restaurant’s menu (Sarasvathy, 2001). This is an example of the causation approach, whereby entrepreneurs may define pre-set goals and employ all their efforts and means to achieve those goals. On the other hand, when entrepreneurs try to use their available means to create *effects*, the process is called effectuation. Such is the case when a restaurant chef looks in the cupboard and cooks whatever is possible with the available ingredients, without limiting potential creations to the menu. Causation processes use many-to-one mapping, while the effectuation processes use one-to-many mapping. As Sarasvathy (2001) has discussed, both approaches “are integral parts of human reasoning that can occur

simultaneously, overlapping and intertwining over different contexts of decision and action” (Sarasvathy, 2001, p. 245).

2.5.1 The Principles of Effectuation

Five principles are the core of the rudimentary theory of effectuation, which describes how entrepreneurs think and how they make a decision. The basic premise for these five principles is Knightian uncertainty (Knight, 1921), which focuses on immeasurability of the future and the underlying risks.

2.5.1.1 The Bird-in-Hand Principle (Entrepreneurs’ Set of Means)

The process of effectuation generally starts with three categories of entrepreneurs’ “means”: “who I am”, “what I know” and “whom I know”(Sarasvathy, 2001, 2008; Sarasvathy et al., 2014).

- **Who I am**

“Who I am” refers to the traits, characteristics, and abilities of entrepreneurs. A plethora of studies has been undertaken on entrepreneurs’ characteristics, attributes, abilities, and traits. Some of these studies investigated special traits entrepreneurs have that a majority of the population do not possess. Others have investigated the role of these traits in relation to the success of firms. Both approaches present a profile of entrepreneurs’ special characteristics to understand how they act and what traits they use in creating organisations. As Gartner (1990, p. 62) says, “[s]tudies of psychological characteristics of entrepreneurs, sociological explanations of entrepreneurial cultures, economic and demographic explanations of entrepreneurial locations, etc., all such investigations in the entrepreneurship field actually begin at the creation of new organisation.”

The special characteristics of entrepreneurs influence their ability to run a business. In 1943, Schumpeter (1943) recognised that entrepreneurs have some attributes that other ordinary people do not, and these attributes enabled them to build new businesses that are regarded as engines of capitalism. Schollhammer and Kuriloff (1979) also maintain that entrepreneurs have some characteristics that differentiate them from other people, such as the need for achievement, desire for responsibility, preference for moderate risk, perception of probability of success, stimulation by feedback, energetic activity, future orientation, skill in organising, and attitude toward money. Some scholars also argue that entrepreneurs' characteristics can form the firm's orientation and strategy development in small firms (Karami, Analoui, & Kakabadse, 2006).

Family background and genes of entrepreneurs have also been the subject of some studies attempting to explain entrepreneurial behaviour. For example, Schollhammer and Kuriloff (1979) found that English entrepreneurs come from lower and middle class origins whereas American entrepreneurs come from parents in comfortable financial circumstances. Likewise, Hunter and Wilson (2007) investigate entrepreneurs' differences in New Zealand. After studying 178 entrepreneurs from 1840 to 1990 in New Zealand, they found that New Zealand entrepreneurs arise from the lower middle class, have commercial family backgrounds and use their skills in their businesses. In contrast, Zhang et al. (2009) investigated a large sample of identical and fraternal Swedish twins, concluding that genes do not determine entrepreneurship because shared environments may have a different effect on children's tendencies to become entrepreneurs.

Other studies tried to address the differences between entrepreneurs and general managers to isolate the special attributes of entrepreneurs. Stewart, Watson, Carland and Carland's (1999) study, for instance, addresses the differences between entrepreneurs, small-business owners, and

corporate managers. In this study, they investigate three classic themes in the literature; achievement motivation, risk-taking propensity, and preference for innovation. A survey of 767 samples from 20 states of the southern United States was collected. The results of this study show that those who were labelled as entrepreneurs rank high in all three categories. Small business managers are low in achievement motivation and preference for innovation and medium in risk-taking propensity. In comparison to the entrepreneurs group, corporate managers ranked low on all three dimensions. The study clearly shows the difference between entrepreneurs and corporate managers, indicating that the proclivity for being an entrepreneur is higher among the first group.

- **What I know**

“What I know”, or the knowledge and experience of an entrepreneur is the second “mean.” Ulrich (1997) considers knowledge and experience to be intellectual capital that has a positive effect on firm performance. In this regard, scholars have attempted to classify the specific knowledge and ability that could lead entrepreneurs to be successful. Knowledge and experience also impacts on exploration of new opportunities, as discussed earlier (Ardishvili & Cardozo, 2000; Shane, 2000).

Different levels of entrepreneur knowledge and experience lead to the creation of different organisations and different performance levels in the marketplace (Honold & Silverman, 2002), therefore, different levels and attributes of knowledge affect how entrepreneurs act. For example, Smith (1967) investigated the attributes of entrepreneurs, including education and work experience, and identified two specific groups. The first is the “craftsman” group, which is defined especially by the “tool-and-die” work experience, whereas the second group is the “opportunist” group, defined by the presence of education and planned works. Barden (1977)

categorised entrepreneurs as caretaker and administrator, while Filley and Aldag (1978) developed a three-fold classification of groups: craftsman, entrepreneur and professional. From another perspective, Carson and Gilmore (2000a) classified entrepreneurs based on their marketing knowledge and ability. They argue that entrepreneurs may have analytical and creative skills and can be placed into three categories: limited marketing ability, technical competency, and learning new competency while doing business.

In conclusion, the issues of “who I am” and “what I know” refer to entrepreneurs’ special characteristics, family backgrounds, education and experience. An understanding of “who I am” and “what I know” can help entrepreneurs to leverage their knowledge and ability to create a firm or explore an opportunity. As Sarasvathy (2001) suggests, the matter of “who I am” and “what I know” is the core concept of effectuation because the effectuation process is dependent on the actor.

- **Whom I know**

“Whom I know” refers to entrepreneurs’ social and business networks. A number of studies confirm the relationship between an entrepreneur’s network and firm success (e.g. Coviello & Cox, 2006; Coviello & Munro, 1997; Hite & Hesterly, 2001; Vasilchenko & Morrish, 2011). As mentioned earlier (section 2.4.6), networks are considered as social capital of entrepreneurs and assist them to develop their current business and create a new one. Entrepreneurs at the first stage of firm development turn to people they know for help and try to gather required resources. The main source of much needed resources often comes from people entrepreneurs already know or are close to, such as family, next of kin, or friends. Studies show that entrepreneurs at the initial stage of forming a firm prefer to control their financial situation

and desire to borrow money from someone they know (Sarasvathy, 2001; Smith, 1967).

Therefore, this “mean” is as important as the first two means and plays a significant role in the development of a new firm.

2.5.1.2 The Affordable Loss Principle

Causation logic suggests entrepreneurs maximise their profit and potential return while effectuation logic is based on affordable loss. Affordable loss explains how entrepreneurs 1) decide what they can afford to lose and 2) what they are willing to lose (Dew, Sarasvathy, Read, & Wiltbank, 2009).

Dew et al. (2009) confirms the difference between causal and effectual logic in decision-making for financing a business. Causal logic is generally based on Net Present Value (NPV), and managers seek to maximize the project/business NPV but in effectual logic, entrepreneurs try to find out how much money they can invest, and how much they are willing to spend. The study shows that entrepreneurs are more concerned than classic managers about the amount of money they can invest on their projects, and they prefer to think about the affordability of spending money rather than thinking of how much would be returned.

The principle of affordable loss goes back to opportunity discoveries as well. Amit, Muller and Cockburn (1995) suggest that when the cost of opportunity is low, entrepreneurs are likely to undertake entrepreneurial activities. They argue that those employees who have less than average payment in large firms leave their job and start a new business. This result is consistent with the affordable loss proposition (Dew, Sarasvathy, et al., 2009), which postulates that when entrepreneurs think about affordability rather than expected returns, they may quit their job and find their own firm.

2.5.1.3 The Crazy Quilt Principle (Strategic Partnerships)

Effectuation emphasises selecting partners to reduce the risk of the competition in the market and eliminate (or at least reduce) uncertainty in the market. Entrepreneurs generally select their partners from their networks (Sarasvathy et al., 2014). In a study of portfolio entrepreneurs, Morrish (2009) found that extremely successful participants were not averse to partners and were willing to form partnerships, in contrast to the dominant view that entrepreneurs prefer to have full control of their business.

2.5.1.4 The Lemonade Principle (Leveraging Contingencies)

Entrepreneurs seize surprise moments as a source of new opportunity. Sarasvathy (2001, 2008) argues that in uncertainty, entrepreneurs benefit from leveraging surprises rather than a goal-oriented search that focuses on exploiting pre-existing knowledge. She suggests that it is better to exploit contingencies, which may take more time than being competitive. It means that entrepreneurs may enter spaces that are full of risks and use all contingencies in their surrounding environment by relying on their capability. Entrepreneurs are usually concerned about financial issues when entering a new market or running a business. They manage this risk by using their managerial and entrepreneurial competencies and personal and business networks (Gilmore, Carson, & O'Donnell, 2004).

2.5.1.5 The Pilot-in-the-Plane Principle (Control of the Future)

A causation model strongly relies on predicting the future. Acquiring information from the market is one of the general sources of prediction. In contrast, effectuation does not rely on prediction, because it holds that the future is unpredictable and many changes could happen. Effectuators try to control those aspects of the future rather than predict them. As such, they do

not necessarily rely on market research and data from the market (Dew, Read, et al., 2009; Read & Sarasvathy, 2005).

The challenge of prediction and control forces entrepreneurs to monitor some aspects of an unpredictable future. Large firms at this stage try harder to make better predictions and their main concern is on prediction techniques. Entrepreneurs generally emphasise controlling the future more and try to employ a transformative strategy by not relying on predictive information and instead asking the question of “What to do next?” (Wiltbank, Dew, Read, & Sarasvathy, 2006). This helps entrepreneurs to be flexible in their goals and build a possible future rather than a pre-set one (Dew, Read, Sarasvathy, & Wiltbank, 2011). The other advantage is using available means to create possible opportunities and try to leverage contingencies by paying attention to how much they can afford to lose.

2.5.2 Difference between Effectuators and Causators

An investigation of 27 expert entrepreneurs and 37 managers with little entrepreneurial expertise indicated significant differences between expert entrepreneurs and managers in decision-making and creating a new venture (Read, Dew, Sarasvathy, Song, & Wiltbank, 2009). Expert entrepreneurs do not rely on predictive information and prediction techniques. Rather, they use effectual logic to tackle uncertainty in markets, while managers use causal logic to deal with companies' futures. The study reported that expert entrepreneurs do not rely on marketing research, and refuse prediction information about a market, whereas managers are more inclined to make decisions based upon marketing research and information provided by such techniques.

A similar survey was undertaken to examine the differences between expert and novice entrepreneurs (Dew, Read, et al., 2009). Consistent with the study mentioned above, findings

indicated that expert entrepreneurs think in an effectuate manner while the reasoning of novices followed a causation approach. Thus, expert entrepreneurs and novices are different in several elements of thinking and decision-making. The study shows that entrepreneurs think differently from those described in textbooks and contradicts classic views.

According to Dew et al.(2009), expert entrepreneurs also make decisions based on their previous experience and are concerned with quick financial commitment in new businesses. They tend to identify new target markets and create product scenarios. Furthermore, at the initial stages of firm formation or new product development they are more likely to use a price skimming strategy to position themselves in the market and are able to define more distribution channels than managers can. In addition, expert entrepreneurs (more than managers), prefer to initiate a sale themselves.

A research by Read and Sarasvathy (2005) found that novice entrepreneurs' preferences for effectuation will increase when they become experts and both highly effectual and causal novices learn to balance their preferences as they become experts. The authors' further observations show that successful firms are more likely to have started through effectuation reasoning and expanded through causation over time. In line with them, another study about biotechnology entrepreneurs confirmed that entrepreneurs started their firms in effectuation mode and shifted to causation due to some regulatory and financial considerations over time. However, authors argue that entrepreneurs can employ effectuation or causation, or a combination of both logics at the same time (Maine, Soh, & Dos Santos, 2014).

Concisely, effectuation is the logic of entrepreneurial decision-making based on what entrepreneurs possess to achieve different ends. However, how effectuation affects growth has

not been covered in the literature. The studies reviewed here show that entrepreneurs' characteristics are different from non-entrepreneurs and their characteristics impact growth, but how they do is still largely unknown. Read et al. (2008) suggest that there are elements of effectuation in the growth of firms but it is not clear what these factors are. This present study does not aim to investigate the relationship between effectuation and fast growth; it tries instead to draw a broad picture of how entrepreneurs exploit new opportunities, which can be a result of a serendipitous event in a fast-growth firm. Effectuation in this study refers to the process and skill of the entrepreneur in exploiting new opportunities to grow fast. In other words, we look at fast-growth firms to understand how entrepreneurs deal with new opportunities and what tools they use to exploit them.

2.6 Entrepreneurial Marketing

Entrepreneurial marketing (EM) was theorised from the investigation of entrepreneurial behaviour and marketing needs in a hyper-competitive environment (Hills, Hultman, Kraus, & Schulte, 2010; Hultman & Hills, 2011). EM is considered an opportunistic view to search for novel ways to create value for customers, especially in dynamic markets (Morris et al., 2002). EM is linked to opportunity recognition and enables firms to proactively search for opportunities through innovation, risk-taking, and value creation for customers. Hills and Hultman (2007, p. 2) define entrepreneurial marketing (EM) as:

[A] spirit, an orientation as well as a process of passionately pursuing opportunities and launching and growing ventures that create perceived customer value through relationships by employing innovativeness, creativity, selling, market immersion, networking and flexibility. While administrative marketing (AM) is traditional marketing

management, EM seeks more opportunities in market via being more creative, opportunistic, flexible and fast response to market.

Morris et al. (2002) distinguishes EM from “traditional marketing (TM)” and remarks that there is a continuous spectrum for a firm's position to choose between EM and TM, and each of them reflects the firm’s specific environment. As they argue, EM is a suitable approach in an era of change, complexity, chaos, contradiction, and scarce resources whereas in TM-based firms, environment is more stable and firms are in an established market.

Customers and entrepreneurs are important elements in EM that enable firms to pursue new opportunities and be innovative. Morrish, Miles and Deacon (2010) propose a model of EM where customers and entrepreneurs are the core actors. They posit that EM should be incorporated into the firms’ culture and strategies should reflect and adapt to EM. EM is not only a concept, but also shapes the strategy of the whole firm. EM strategies are developed by an opportunity-recognition approach as well as innovation in order to achieve growth and success. Finally, the external layer of the model encompasses practical actions using the marketing mix by exploiting opportunities that emerge from changes in the external environment, such as technology changes.

Hills and Hultman (2011a) define EM as marketing practices that entrepreneurs execute in their firms. EM can be implemented at all levels of the firm, irrespective of its size. Proactiveness, growth orientation, risk-taking propensity, innovation, and opportunity orientation are the main core of EM. Similarly, Miles, Crispin, and Kasouf (2011, p. 131) define EM as “a proactive approach to marketing that emphasizes continuous innovation, managing risk, leveraging resources effectively and marketing as the centre of the innovation process.” In another study, Miles and Darroch (2006) propose elements of entrepreneurial marketing that include

customer intensity, value creation, resource leveraging, risk management, innovation, proactiveness, and being opportunity-driven. They argue that although the concept of EM is more attributed to SMEs, large firms can also create a competitive advantage through employing these elements.

The focus of EM is on adapting marketing to forms that are appropriate to small and medium-sized enterprises (SMEs), acknowledging the likely pivotal role of the entrepreneur and their opportunistic point of view in marketing activities that distinguishes them from being simple owner-managers (Gilmore, 2011; Sanayei, Jalilvand, Ebrahimabadi, & Samiei, 2011). EM is also a concept that reflects some marketing alternatives such as guerrilla marketing, radical marketing, and expeditionary marketing (Morris et al., 2002). At a practical level, EM largely relies on networking, innovation, and adapted marketing practices, and does not employ conventional marketing practices that are textbook-based (Gilmore, 2011; Gilmore & Carson, 2007).

Innovation does not only mean creating new products and services, it also encompasses all aspects of marketing activities in an entrepreneurial firm (Cummins, Gilmore, Carson, & O'Donnell, 2000). Most of the literature in this realm views innovation as inventing new products, but due to the lack of resources of small firms, innovation can be applied in all aspects of marketing activities (Cummins et al., 2000; O'Dwyer, Gilmore, & Carson, 2009). Creating added value to the products and services, offering unique propositions to customers, and differentiating themselves in the marketplace are some actions that make small firms innovative in their marketing practices (Gilmore, 2011; O'Dwyer et al., 2009).

Networking is an integral part of entrepreneurial marketing. Hite and Hesterly (2001) argue that networks are used in order to gain access to more resources. Entrepreneurs use their networks to acquire needed resources, make decisions on products and services and improve marketing practices (Gilmore, 2011; Gilmore & Carson, 2007; Gilmore, Carson, & Rocks, 2006). Networks are also very crucial in the process of market development and serving current and prospective customers better (Gilmore et al., 2006; Vasilchenko & Morrish, 2011). In addition, entrepreneurs obtain market information through peers and personal networks to adjust their marketing practices. Lack of resources to buy or conduct formal market research leads them to connect with their personal and business networks, which is not only cheaper, but also more reliable (Collinson & Shaw, 2001). Networks also help entrepreneurs to improve their marketing management competencies to compete and perform efficiently in the marketplace (Gilmore, 2011).

Entrepreneurs adapt traditional marketing principles (especially the classic 4Ps—Product, Place, Price and Promotion) to an entrepreneurial form due to the requirements of small firms (Gilmore, 2011; Gilmore & Carson, 2007). For example, delivering unique value to customers through offering high-quality products with additional services is a product strategy of entrepreneurial firms that can offer more value for money to customers (Carson, Gilmore, Cummins, O'Donnell, & Grant, 1998). As not all entrepreneurial firms are able to spend more on advertising, word of mouth is a usual way of promoting the business (Gilmore, 2011; Stokes, 2000a). In terms of distribution, meeting customer expectations, being on time and reliable are commonly practiced strategies by entrepreneurial firms (Gilmore, 2011). E-technology is another facet of marketing practices that entrepreneurial firms employ (Gilmore, Gallagher, & Henry, 2007). Internet-based marketing, e-CRM, websites, and social media are some tools that

entrepreneurial firms use to reach the end customer efficiently and with less cost (Gilmore, 2011; Gilmore et al., 2007; Kaplan & Haenlein, 2010). Another benefit of e-technology is the reduction of promotional costs, in terms of printing catalogues or other required documents. It also assists the firms to collect necessary information from their customers online (Gilmore, 2011; Gilmore et al., 2007)

The concept of traditional marketing principles in entrepreneurial firms is controversial and scholars like Martin (2009), and Zontanos and Anderson (2004) have proposed a different set of practices for small firms. Martin (2009) reconciles three dimensions of traditional marketing (Adopted from Kotler, 2001) with entrepreneurial marketing. At the cultural level, innovativeness, risk-taking, and proactiveness (Morris et al., 2002) should be pervasive concepts in a firm. At the strategy level, innovation plays a significant role. And finally, at the tactical level, market intelligence is gained through direct and personal relationships with clients to get first-hand information, which is different from traditional marketing research (Martin, 2009; Stokes, 2000a) and is done informally through networking (Stokes, 2000a, 2000b).

Altogether, entrepreneurial marketing is marketing with an entrepreneurial mindset that is more suitable for constantly changing markets. This approach encompasses the notion of entrepreneurship through implementing two facets of Entrepreneurial Orientation (EO) and Market Orientation (MO). Innovation, risk-taking, and proactiveness shape EO and MO is gained by market intelligence through personal observation. At a practical level, EM is about applying marketing practices in a manner that is best suited to the market needs of entrepreneurial firms. Although most entrepreneurs do not have relevant marketing knowledge, especially in the early stages of the firm (Stokes, 2000a; Zontanos & Anderson, 2004), they learn to improve marketing

activities over time (Carson & Gilmore, 2000b). This experiential learning is a result of relying on networks and the practices of adapting marketing principles helps firms to develop their marketing competencies.

2.6.1 Entrepreneurial and Market Orientation

EM has two dimensions that reflect the interface between entrepreneurship and marketing attributes. Morris et al.(2002) argues that proactiveness, risk-taking, innovation, and opportunity focus reflect the *face of entrepreneurship* in firms, while customer intensity and value creation reveal the *marketing face* of EM firms. In line with Morris et al. (2002), Morrish (2011), in her attempt to clarify the concept of EM, notes that any firm that uses the concept of EM is an entrepreneurial firm and argues that EM is characterised by innovation, proactiveness, and risk taking, which enables the firm to be more flexible in exploration and exploitation of new opportunities. As Morrish argues, firms apply an EM strategy and employ a two-pronged approach toward their market. They may implement either an entrepreneurial orientation (EO) approach or a market orientation (MO) approach or potentially both. Entrepreneurial orientation “describes how new entry is undertaken” (Lumpkin & Dess, 1996, p. 136) and has three dimensions: innovation, risk-taking, and proactiveness. Innovation is the process of creating new products, services, and technologies; risk-taking is entering unknown spaces; and finally, proactiveness is being an opportunity-seeker (Lumpkin & Dess, 2001; Rauch et al., 2009). Market orientation implies acquiring information about clients through market intelligence and preparing appropriate reactions to respond to market changes (Jaworski & Kohli, 1993).

Morrish (2011) argues that in today’s dynamic market, implementing both approaches is essential in order to be flexible in a changing environment. She argues that MO is already applied

in firms using traditional marketing, but to be more entrepreneurial, firms need to employ EO approaches. MO is an appropriate approach in a stable environment, while EO is more suitable in a changing and turbulent environment. Furthermore, as MO is a customer-centric approach, it seems that this approach and the notion of traditional marketing, which considers customers to be the central focus, is not always an appropriate orientation.

The impact of EM (and its two orientations, EO and MO) on growth and performance of the firm has been widely investigated by scholars. EO has been found to have positive effects on the growth and performance of firms (e.g. Covin, Green, & Slevin, 2006; Hughes & Morgan, 2007; Moreno & Casillas, 2008; Rauch et al., 2009; Wang, 2008; Wiklund & Shepherd, 2003b). For instance, Moreno and Casillas (2008) assert that EO and growth are strongly related to each other, and innovation, as one of the elements of EO, has the greatest influence on firm growth. This growth is moderated by the availability of resources and the external environment. In a meta-analysis of studies since 1981, scholars (Rauch et al., 2009) found a positive relationship between EO and firm performance. The effect of EO in smaller firms is higher than in larger firms due to flexibility in decision-making that allows them to take advantage of market changes. EO has a greater effect on high-tech products as a result of the dynamic environment. Matsuno, Mentzer, and Özsomer (2002) report that EO has a direct and indirect significant impact on business performance. They delineate a clear relationship between EO and performance, which causes less formalisation, centralisation, and departmentalisation in an organisation. EO influences MO as well, in order to achieve a better performance in terms of market share, new product sales, and ROI. Furthermore, employing EO in small firms can enhance the MO of the firm in terms of information acquisition about promotion and distribution. It also has a significant impact on a firm's performance (Keh, Nguyen, & Ng, 2007). However, the dimensions of EO are

independent (Lumpkin & Dess, 1996) and firms can be very entrepreneurial in specific dimensions due to the environment, industry, market, and technology changes (Casillas, Moreno, & Barbero, 2010; Hughes & Morgan, 2007).

The effect of MO on performance of the firm has been studied more extensively for large firms than for small firms (e.g. Kirca, Jayachandran, & Bearden, 2005; Noble, Sinha, & Kumar, 2002; Slater & Narver, 2000). Appiah-Adu (1998) found that MO has a positive impact on new product success, sales growth, and profitability. Furthermore, in dynamic environments, market orientation encourages product innovation (Boso, Cadogan, & Story, 2013). This is consistent with Pelham's (1999) findings that emphasise the importance of MO in developing a proper strategy to respond to market changes. Pelham's findings show that MO is strongly related to the growth and competitive advantage of small firms. Kara et al. (2005) also found that dimensions of EM such as market intelligence, dissemination of information within the firm, and proper response to the market changes have a positive link on performance of small firms in the service sector. In sum, despite scarce research about the effect of MO in smaller firms, extensive literature shows that MO has a positive effect on the performance of small firms. It is worth noting that performance measures are very divergent; however, the overall picture depicts that MO and performance are positively related to each other.

As a whole, EM is a concept that captures the spirit of entrepreneurship and synthesises it with the marketing practices of firms. Indeed, EM is seen as a practical culture and strategy influencing the whole organisation's activities and decision-making process to pursue new opportunities. For the sake of implementing EM in a firm, two dimensions of EO and MO are considered according to the environment and market of the firm. Employing and implementing

either of these approaches is dependent on the ability of the firm, the extent to which it is entrepreneurial, the turbulence of the market, and the power of its competitors. At a practical level, EM does not employ conventional marketing activities and depends largely upon networking, innovative marketing, and the adapted 4Ps. EM and its two dimensions have a positive effect on business performance and growth of firms. At the level of decision-making, EM represents effectual thinking in entrepreneurship and encompasses the spirit of effectual marketing. EM is similar to the effectuation logic and combination of EM and effectual thinking can be a good solution for turbulent markets with tense competition and uncertainty (Read et al., 2009). Entrepreneurs could gain more from employing effectuation in terms of means and principles to progress and plan, step by step (Whalen & Holloway, 2012). All in all, deploying EM as a culture in small firms can improve performance of the firm and help the entrepreneurs to be more opportunistic, innovative, and proactive to respond quickly to market and customer changes.

2.6.2 Entrepreneurial Marketing and Effectuation Logic

Entrepreneurial effectuate thinking and continuous efforts to improve customer value may be better off than what is prescribed in the traditional market theories. (Hultman & Hills, 2011, p. 122)

Based on the process of thinking and decision-making, EM and effectuation are similar. Hultman and Hills (2011) argue that in a dynamic environment with many competing players, entrepreneurial marketing, combined with the logic of effectuation, is a better way to survive. Nijssen (2014) proposes an effectual entrepreneurial marketing approach that encompasses learning and process of discovery of uncertainties. He suggests this method especially for new products, which are extremely new to the market and argues that for new ideas marketing needs

to be combined with the concept of effectuation to shape a new method of marketing. As Hills and Hultman believe (2011a), effectuation explains the uniqueness of EM in comparison to traditional marketing. The logic of future control in effectuation is in line with EM implementation, which tries to be more innovative and risk-inclined in unplanned contingencies in the market. They believe that “*EM is to effectuate*” and indicate that:

Applying this theme to strategic management, it was concluded by Sarasvathy (2001) that the traditional view of attaining ends (e.g. profit, market share) must be complemented with entrepreneurship, the achievement of beginnings, and the creation of products, firms and markets. The same observation may be made about the nature of EM. (p. 4)

They argue that today’s market is very turbulent and dynamic, and entrepreneurship is an integral part of marketing of such an environment. Their proposed model demonstrates the interaction of a dynamic market and entrepreneurship concepts such as effectuation, innovation and opportunity orientation. Entrepreneurs’ social networks facilitate the interaction of business founders with their surrounding environment and this mutual connection links entrepreneurship to effectuation logic (Lam & Harker, 2013).

Whalen and Holloway (2012) argue that unlike using traditional marketing, entrepreneurs create new opportunities with what they have at their disposal. Pre-set planning would thus be a waste of resources because entrepreneurs learn over time how to make an efficient plan using experiential learning. They suggest a model of effectual marketing planning for a new firm through market-oriented learning instead of traditional marketing planning. In this proposed framework, marketing planning is short-term with a few resources (means) and entrepreneurs actively search for new opportunities as a reaction to market changes. This model is likely to be

similar to the EM dimensions, entrepreneurial and market orientation, to find new opportunities and respond accordingly to clients' needs.

2.7 Conclusion and Rationale for Analysis

Serendipity in management and entrepreneurship is a relatively new concept. It is apparent from the available literature that serendipity has been and remains a phenomenon in science and it is an attractive subject in many fields like information-seeking and innovation. Additionally, it has recently gained attention in the field of entrepreneurship. The small amount of published research in this area is evidence showing this subject, in particular its impact upon the growth of firms, needs more attention from scholars. It is an important phenomenon that needs scholarly investigation in light of Hills and Hultman's (2011b, p. 15) suggestion: "[h]ow do some entrepreneurs get lucky without empirical research/explanations?"

Effectuation is conceptualised in the present study as an entrepreneurial instrument to exploit new opportunities. The effectuation literature has grown significantly in the past decade and it is time to investigate the relationship between effectuation and other concepts in entrepreneurship (Perry et al., 2011). Knowledge of how and to what extent entrepreneurs in fast-growth firms use effectuation logic for opportunity exploitation and development will enhance theoretical and practical understanding of entrepreneurship.

To successfully exploit opportunity, entrepreneurs need to employ appropriate strategies. Entrepreneurial marketing links the exploration of opportunities to operating in markets. EM is becoming a well-established area of research, and a more widely used approach in the twenty-first century (Morrish, 2011). Scholars have recognised the correlation between effectuation and EM in the exploitation of new opportunities in recent years. Hills and Hultman (2011a) suggest

that EM is likely effectuate. However, the literature has not yet fully captured the connection between EM and effectuation and how such thinking is reflected in marketing practices. Hence, this research attempts to link effectuation to EM and explore how their contributions affect opportunity exploitation.

This study applies a process-oriented approach to investigate fast growth in entrepreneurial firms (Wright & Stigliani, 2013). It is done by linking three distinctive areas of research to shape a trajectory of fast growth (from opportunity exploration to exploitation to fast growth). Additionally, many studies focus on just a single country, and many others compare countries in similar environments. Since there has not been any study comparing western and eastern entrepreneurship (e.g. New Zealand and Iran) perspectives on fast-growth firms, this offers an exciting opportunity to test our proposed model (see Chapter 3). As we will discuss later in the methodology chapter (see Chapter 4), New Zealand and Iran were chosen for this study.

Finally, the three constructs, serendipity, effectuation, and entrepreneurial marketing, are investigated in this study. Understanding how these concepts interplay and how they influence fast growth will no doubt have significant implications for entrepreneurial opportunity exploration and exploitation.

Chapter Three: Conceptual Framework

3.1 Introduction

Conceptualising the interrelationship between the constructs of the study is the first step in conducting research (Schram, 2003). This helps the researcher to capture a broad impression of how different factors are interrelated. Therefore, in this chapter, the research synthesises available literature to build a broad and integrative conceptual framework through investigating the interrelationship between different factors, shaping a comprehensive model to describe how these factors interact. The framework is explained in two phases of exploration and exploitation of opportunities. In each phase, we present our propositions relating to the discussed literature, and finally, our conceptual framework is presented in relation to fast growth.

3.2 Exploration Phase

3.2.1 Source of Opportunity

Understanding opportunity exploration depends on the assumptions regarding the nature of entrepreneurship. Three schools of thought can be distinguished in entrepreneurship. These perspectives have different assumptions about opportunity and the entrepreneur (Shane, 2000). Based on these assumptions, we build a relationship between serendipity as the first main construct and opportunity exploration as the consequence of a serendipitous accident. These three schools of thought (theories) and their assumptions are presented here.

3.2.1.1 Neoclassical Equilibrium Theory

The neoclassical school of thought of entrepreneurship assumes that no one can recognise any new opportunities. In this theory, the market consists of agents and their goal is to maximise

profits. Everything else, including price, is clear in the market (Shane, 2000). Supply and demand in the market is determined by utility maximisation of individuals and profit is maximised through cost-constrained organisations in the market that have used all possible resources. In such an economy, information is equally distributed among individuals. No one can realise misalignment in the market and therefore, no one can recognise new opportunity.

Entrepreneurship is defined in this school of thought by an individual's preference to be an entrepreneur. Those who have this willingness and who do not want to be employed by somebody else tend to become entrepreneurs. The basic assumptions of neoclassical theory are that everyone has all of the information in the market and can realise all opportunities and that personal willingness to be an entrepreneur, rather than information about opportunity, defines who will become an entrepreneur (Shane, 2000; Walsh & Gram, 1980).

3.2.1.2 Psychological Theory

The main focus of psychological theory is on the specific characteristics of entrepreneurs. These characteristics alone define entrepreneurs. This theory was discussed in the previous chapter. In short, it pointed out that some people have special characteristics, such as a need for achievement, risk-taking, etc., while others do not. In this notion of entrepreneurship, these specific characteristics enable people to become entrepreneurs, while opportunity doesn't play an important role (Ennew & Binks, 1996). These traits, along with the ability and willingness to become an entrepreneur, distinguish entrepreneurs from non-entrepreneurs (Shane, 2000).

3.2.1.3 Austrian Theory

The Austrian theory criticises the equilibrium models and believes that the market encompasses people who have different information and possessions that enable them to realise

different opportunities (Dulbecco & Garrouste, 1999). It is not necessary to search for information, and every person can find an opportunity without actively searching for it. In addition, not every person is able to see all opportunities and recognise misalignment in the market. The assumptions are that information distributed about the market makes people become entrepreneurs, everyone cannot possess all information in the market and therefore cannot see all opportunities, and entrepreneurship is related to the willingness and ability of individuals (Dulbecco & Garrouste, 1999; Kirzner, 1973, 1997; Salerno, 1993; Shane & Venkataraman, 2000),

Reviewing these three schools of thought in entrepreneurship and opportunity exploration allows us to pick our theoretical basis about the interrelation between opportunity and serendipity. The Austrian school of thought appears to be more suitable for exploring the nature of entrepreneurship (Siegel & Renko, 2012). When Kirzner (1973, 1997) discusses the opportunity exploration process, it makes sense that entrepreneurs do not have all information about the market and all opportunities are not clear to them. In addition, in a situation of uncertainty, which is a characteristic of markets (Kirzner, 1973; Langlois, 2007), decision-making, information-seeking and information-searching is vital for entrepreneurs. In uncertainty, idiosyncratic information in the market leads some people to search for new opportunities. A search process is not a proper tool for finding an opportunity because one cannot find something that does not exist yet (Kirzner, 1997). Therefore, search is only for finding missing information, and cannot be employed for opportunity exploration. Kirzner (1997, pp. 71-72) points out:

An opportunity for pure profit cannot, by its nature, be the object of systematic search. Systematic search can be under-taken for a piece of missing information It is here that the Austrian perspective offers a new insight, into the nature of surprise and discovery.

As described in Kirzner's argument, search is not a proper way for exploring new opportunities and discovery of opportunities is not a purposeful and systematic activity. In contrast, people can explore opportunities by being alert. Other studies allow the conclusion that entrepreneurs may find new opportunities through their own recognition and alertness (Kaish & Gilad, 1991; Koller, 1988), networks (Arenius & Clercq, 2005; Björk & Magnusson, 2009), knowledge and experience (Park, 2005), learning (Lumpkin & Lichtenstein, 2005), and competitors, alertness, and inspiration (Peterson, 1988). However, many studies in this area focus on the ability of entrepreneurs to discover and explore new opportunities emerging from all these sources.

Summarizing the earlier discussion leads to an elegant interrelationship between opportunity exploration and serendipity. As discussed, all these factors lead to the consideration that opportunity exploration in the entrepreneurial process is very similar to the Austrian economic school of thought, which explains opportunity exploration as a phenomenon that is completely different from purposeful search and is supported by the previous knowledge and experience of an entrepreneur. If search is not the source of new opportunities as it is believed to be in traditional marketing (Hultman & Hills, 2011), then another main question is raised: What is the source of new opportunities?

On one hand, most of the studies that have examined and listed the sources of opportunity or new ideas through qualitative and quantitative methods did not offer any specific sources for accidental ideas or entrepreneurs' own recognitions. Exploration through traditional market analysis (Hultman & Hills, 2011), networks (Ardishvili & Cardozo, 2000), marketplace (Hulbert et al., 2012), environment (Sardeshmukh & Smith-Nelson, 2011), inspiration (Peterson, 1988),

errors, small hunches, and sometimes serendipity (Johnson, 2010) are some of the sources that could lead to new opportunities. On the other hand, conceptual frameworks propose serendipity as an element that could lead to new opportunities (Dew, 2009; Johnson, 2010). However, there is a gap in the literature in regard to empirical investigation of this phenomenon in the real business world. Therefore, in this research we propose serendipity as a source of new opportunity in fast-growth firms. In other words, serendipity is a source of opportunity that is supported by all previous knowledge, experience, ability, skills, and so on. Figure 3.1 delineates the interrelationship between opportunity exploration and serendipity.

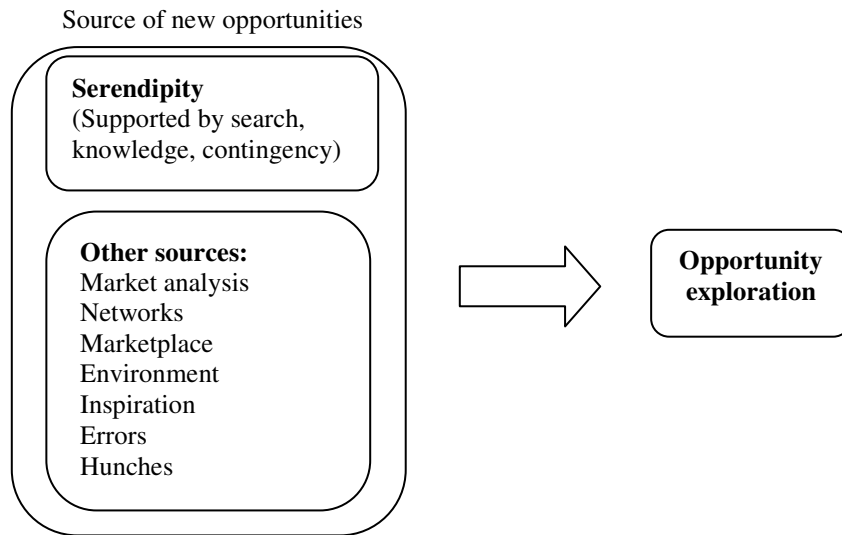


Figure 3.1. Interrelation between opportunity exploration and serendipity

Therefore, in the first instance, we propose the first part of the first proposition that:

P_{1a}: Serendipity is a source of opportunity exploration.

3.2.2 Relationship between Serendipity and Growth

Chance may play a role in entrepreneurship. Following Storey's (2011) OC theory and Coad et al.'s (2012) study based on Gambler's Ruin theory, chance is regarded as an integral part of entrepreneurship and its role in optimism and entrepreneur motivation to continue the business should not be ignored. Glancey (1998) indicates that there are some scholars who consider growth in small firms as a stochastic process that is the result of market turbulence, managerial ability, diversification, and pure chance. In his review of 14 papers testing GIBRAT's Law, Wagner (1992) demonstrates that the law is not valid for small firms. According to GIBRAT's Law, "the probability of a given proportionate change in size during a specified period is the same for all firms in a given industry regardless of their size at the beginning of the period" (Mansfield, 1962, pp. 1030-1031). Wagner (1992) finds that "persistence of chance" in terms of growing fast exists, if a firm has had faster growth in the past. It means that chance affects growth, but he indicates that further research is required to examine whether it is pure chance or something else that results in a successful firm. He further explains that in doing so, scholars need to investigate innovation, strategic planning, attitudes, and expectations of managers.

Therefore, with respect to the role of entrepreneurs, we postulate that chance –here interpreted as serendipity– plays a role in the growth of firms (Friedel, 2001). The second part of our first proposition is:

P_{1b}: Serendipity creates new opportunities that when explored can lead to fast growth.

This approach toward opportunity exploration seems to be overlooked in most of the studies about opportunity. Furthermore, the study draws on a comprehensive conceptual model in relation to effectuation logic and entrepreneurial marketing to depict how entrepreneurs may find

and recognise an opportunity and how they try to exploit it through their set of means and their efforts to be entrepreneurial in a dynamic market.

3.3 Exploitation Phase

3.3.1 Relationship between Serendipity and Effectuation

In the serendipity conceptual framework, contingency is defined as any accidental opportunity that occurs through luck and chance (Dew, 2009). When this contingency is supported by knowledge and search, it could be a serendipitous incident. Furthermore, as Sarasvathy (2001, p. 247) notes in her approach toward effectuation, an “entrepreneur's journey of effectuation might be the result of any one of a wide variety of serendipitous events.” Hence, it is acceptable in the framework that contingency is probably one of the elements that leads to opportunity discovery and serendipitous events. Leveraging contingency or any opportunities that are unplanned in the market is one of the main principles of effectuation (Sarasvathy, 2001; Sarasvathy et al., 2008; Sarasvathy et al., 2014). Therefore, effectuation can be viewed as a comprehensive construct that leverages serendipities emerging from chance, luck, or any other things that may happen and gives the firm enough flexibility to perform a manoeuvre in the market. This relationship is illustrated in Figure 3.2.

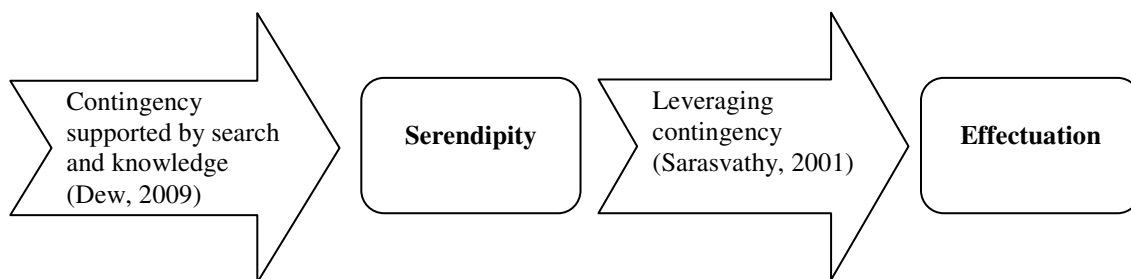


Figure 3.2. Serendipity and effectuation relationship

3.3.2 Relationship among Effectuation, EM, and Growth

Effectuation and EM share a similar mindset. After an entrepreneur explores an intended or unintended opportunity through their alertness, knowledge, experience, and so on, they are likely to exploit it through effectuation logic. EM needs to be engaged at this stage to present a new opportunity in terms of new products, services, market, or industry to the target market. As Hultman and Hills (2011a) argue, effectuation explains the uniqueness of EM in comparison to traditional marketing. In EM, entrepreneurs employ a concept of learning combined with their networks and available resources (Gilmore, 2011), which is similar to the concept of effectuation. Morris et al. (2002) present EM as an unplanned and non-linear marketing method that strongly rely on personal networks which is also similar to effectuation thinking. This is consistent with reactive and informal marketing in SMEs, which is influenced by entrepreneurs (Franco, de Fátima Santos, Ramalho, & Nunes, 2014). In a similar vein, EM is considered “marketing with an entrepreneurial mind-set”(Kraus, Harms, & Fink, 2010, p. 19). This definition is not limited to small businesses and could be equally applied to large firms (Kraus et al., 2010).

Strategy assists entrepreneurs to follow and meet their objectives. According to Mintzberg (1987), a strategy is a plan for a market. Storey (1994) argues that strategy is one of three components– entrepreneur, strategy, and firm – associated with growth in small firms. Therefore, the way entrepreneurs act in a market depends on the strategy of the firm. Effectuation logic and EM are appropriate approaches for entrepreneurial firms because of hyper competition in new markets (Hills & Hultman, 2011a; Hultman & Hills, 2011).

As discussed earlier, both effectuation and EM contribute to the growth of firms. However, the available research on the impact of effectuation on growth is scarce as it is a new

concept in entrepreneurship. Based on the discussion above, we propose that one of the prominent characteristics of fast-growth entrepreneurial firms is applying effectuation logic alongside EM as a strategy to exploit new opportunities. This strategy, the combination of EM principles with effectuation logic, would be a great option, especially for entrepreneurs whose resources are limited. This combination would be gained through developing networks and social ties, focusing on innovation, leveraging resources, taking risks, and employing experiential learning that could lead to fast growth. Consequently, we suggest that:

P₂: Fast-growth firms exploit opportunities through effectuation using EM to achieve such growth.

Our final proposition relates to how new opportunities are discovered and lead to fast growth. This proposition is also captured in our conceptual framework, shown in Figure 3.3, which depicts the interrelationships between the three distinct concepts of serendipity, EM, effectuation, and fast growth as the main focus in this research (broken line in Figure 3.3). This figure shows two distinct phases: exploration and exploitation of opportunities that lead to fast growth.

P₃: Fast-growth firms explore opportunities through serendipity and exploit them through effectuation using EM strategies.

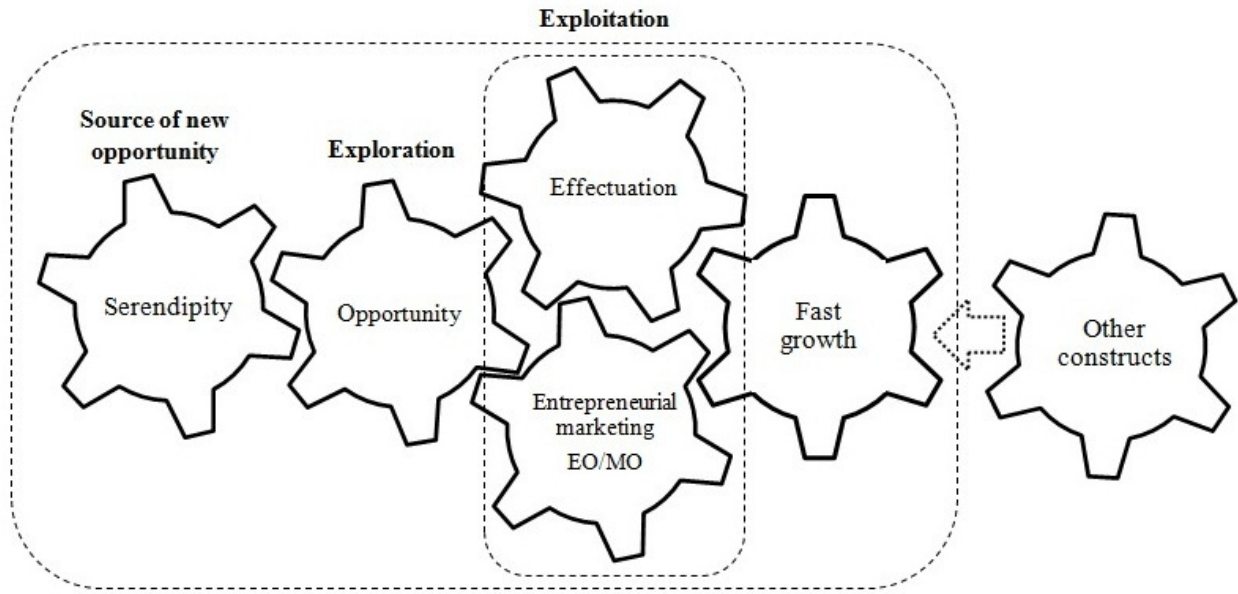


Figure 3.3. Conceptual framework of the research

3.4 Conclusion

The realms of entrepreneurship and growth are broad areas of research. As we are not able to cover all aspects of the research field, the focus of this study is the three principal constructs –serendipity, effectuation and EM – that lead to fast growth. We propose that serendipity is a source of new opportunities and entrepreneurs of fast-growth firms use effectuation logic and EM in exploiting these opportunities. We explore antecedents, processes, and outcomes (Ucbasaran, Westhead, & Wright, 2001) to examine how this perspective fits fast-growth firms. Employing the causal mapping method (see Chapter 4) enables the researcher to draw a realistic picture of firm growth and map every single firm’s story to explore how they achieved such growth.

Chapter Four: Methodology

4.1 Introduction

Research is an ordered process of finding a solution to a particular problem. Sekaran (1992) defines research as “an organised systematic, data-based, critical, scientific inquiry or investigation into a specific problem, undertaken with the objective of finding answers or solutions to it” (p. 5). Research methods can be understood as ways and principles that researchers undertake to conduct a study. Design of a study, sample selection, and data analysis approaches are some of the steps a research methodology follows to resolve or investigate a distinctive research problem (Sekaran, 1992).

The first step in designing a study is to select a topic and paradigm (Creswell, 1994). A paradigm is “a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done, how results should be interpreted, and so on”(Bryman, 1988, p. 4). Creswell (1988) defines it as a concept that helps us to understand phenomena. He notes that a research paradigm embraces both theories of research and methods of conducting research. Two major paradigms, qualitative and quantitative, are discussed in the literature. These paradigms will be articulated in the following sections.

Qualitative approaches allow for deep understanding of a research subject that has not been previously researched. This research employed a qualitative rather than quantitative approach because of the nature of the concepts being investigated, in order to observe the hidden layers and capture better definitions about the factors involved in the research. Thus, qualitative research is the main paradigm of this research in exploring the role of serendipity, effectuation logic, and EM in fast-growth firms. Data was collected through conducting multiple case studies

and in-depth, semi-structured interviews. We used causal mapping as a technique to analyse the data that was gathered from interviews and triangulated by other available documents. These are discussed in the following sections.

4.2 Justification of Paradigm and Assumptions

The paradigm of this research is qualitative. Creswell (1994) defines qualitative study as “an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting”(p. 2). The how, what, when, and where of an issue can be manifested using qualitative research, explaining the essence and the nature of phenomena (Berg, 2007).

Qualitative research is a more dynamic and interactive approach (Darmody & Byrne, 2006) used to study the social world, analyse the culture and behaviour of human beings, and describe it in words (Bryman, 1988). In contrast, quantitative research is based on theory testing of dependent and independent variables and is associated with numbers analysed by statistical procedures showing the degree to which theory can be generalised (Bryman, 1988; Creswell, 1994).

Although quantitative research is a dominant method in social science, the researcher can derive greater understanding of a problem by doing qualitative research; albeit qualitative research takes longer and requires greater clarity in goal definition (Berg, 2007).

There are five qualitative assumptions that justify why a researcher needs to use a specific paradigm (Creswell, 1994; Morrish, 2008). A researcher uses these assumptions to justify the approach chosen to study the research question(s).

Ontological assumption. This assumption refers to the nature of the type of reality that is under investigation. In quantitative research, “reality” is objective and the

researcher can measure reality, but in qualitative studies, reality is subjective and multiple realities can occur, constructed by three parties directly or indirectly involved in the research: the researcher, the research subject, or participant(s), and a third party reading and interpreting the research. Therefore, in qualitative studies the researcher needs to acknowledge the realities and report them.

Epistemological assumption. Here, the assumption refers to the relationship between the researcher and what is being researched. In qualitative studies, the researcher interacts with the research, so the impact of the researcher needs to be minimised. We will try to reduce our interference in the study and will report any relationships that may affect the study.

Axiological assumption. This refers to the role of value. This study represents value-laden and biased information. To minimise this bias, the value of fieldwork information, the researcher's personal values, and biases will be reported and as Creswell (1994, p. 6) suggests, "the language of the study may be first person and personal." Therefore, the researcher of this study acknowledges that he has about seven years' experience in business, especially in marketing and the marketing research field; therefore, he tries to avoid any preconceived and biased judgment. However, this personal experience could be seen as a considerable strength and can increase the researcher's understanding and interpretation of the cases he investigates (Hulbert et al., 2012).

Rhetorical assumption. This assumption relates to the language of the research. The language of this study will be personal and it uses of accepted qualitative terminology will be defined.

Methodological assumption. The last assumption relates to the process of the research. The prevailing research will be inductive and patterns and perspectives will be built based on the results that emerge from informants, rather than the researcher's personal definitions.

4.3 Case Study Research

Creswell (1994) lists four common methods for a qualitative approach, namely ethnographies, grounded theory, case studies, and phenomenological studies. Using ethnography, the researcher attempts to investigate a cultural group of people in a continuous period of time to identify phenomena, patterns, or norms. In grounded theory, the researcher tries to derive a theory by using various methods of data collection. When conducting case study research, understanding a single entity or phenomenon is the main goal of the researcher. Finally, phenomenological studies refer to investigating human experiences by describing the people who participate in research.

Case study research is defined as “an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between the phenomenon and context is not clearly evident” (Yin, 2009, p. 18). Eisenhardt (1989) defines it as “a research strategy which focuses on understanding the dynamics present within single settings” (p. 534). Three distinctive objectives that case studies try to address can be considered in research: 1) provide a description 2) test a theory, and 3) generate a theory (Eisenhardt, 1989). Case study methodology is an appropriate approach when the main question of research starts with “how” and “why” and when the domain of research is likely to cover contemporary events (Yin, 2009). It is applicable for both qualitative and quantitative research through using single or

multiple cases (Eisenhardt, 1989; Yin, 2009). When the researcher wants to test an existing theory, investigate a particular circumstance, or desires to conduct a longitudinal study, a single case study seems the most effective approach. In contrast, multiple case studies are designed to reach the “replication logic,” which means getting more findings through more cases.

“Replication logic” is not equal to multiple respondents like in quantitative research, but it refers to replicating significant findings using more cases to predict similar or contrasting results (Yin, 2009). The findings from multiple case studies can be generalised as a “rule” or a “tendency” that can be verified in other contexts. Multiple cases have to be similar in some aspects, such as being in the same industry, market, or region or possessing similar management thoughts, culture, or maturity level (e.g. age of the firm).

Multiple case study approach is the appropriate method for this research. As the present research uses a conceptual framework (see Figure 3.3) to investigate the postulated interrelationships in that framework, we can investigate and analyse cases to test the framework through building causal connections among concepts, which we discover from investigation.

4.4 Quality Criteria

Qualitative research and the case study methodology in particular have been critiqued mainly in regard to validity and reliability issues (Ellram, 1996). Addressing these criticisms, Ellram (1996) and Flyvbjerg (2006) focus on the misunderstandings related to case study research. The most important issues are as follows:

- 1) The practical knowledge of a case study – Flyvbjerg (2006, p. 223) argues that “social science has not succeeded in producing general, context-independent theory and thus has in the

final instance nothing else to offer than concrete, context-dependent knowledge, and the case study is especially well suited to produce this knowledge.”

2) The power of generalisation of a case study – if the case is carefully chosen it has the power of generalisation.

3) The potential bias toward verification – this can be rejected because the tendency of researchers and their arbitrary judgment is on the level of selecting categories and variables. Previous research has shown that in many case studies the findings demonstrated that preconceived views, assumptions, concepts, and hypotheses could not be supported. From the viewpoint of scientific research, qualitative research and case study research is a valid method.

Despite the qualitative approach demonstrated as being valid, there are some further criteria to guarantee reliability and validity of case studies. Yin (1994, 2009) and Riege (2003) name some of the essential quality criteria for case study research:

- *Construct validity*: This deals with the quality of conceptualisation and identifying the right operational measures for the research constructs and concepts that are being investigated. As measures in qualitative research and case study research are sometimes biased based on personal judgment, construct validity can be enhanced by using multiple sources of evidence (triangulation) and having another researcher review the case interviews (Healy & Perry, 2000; Riege, 2003; Yin, 1994, 2009). Therefore, in this research, data can be triangulated with other available information such as firms’ websites, reports, and so on. The other technique that allows for construct validity is asking a research assistant or peer to review the case study reports and change unclear aspects (Healy & Perry, 2000). This technique was applied in the present study by asking another researcher to examine the interview transcripts.

- *Internal validity*: This refers to the appropriate causal relationships between variables and results and can be enhanced by using clear analytic techniques. Conducting a within-case and cross-case analysis and displaying diagrams and tables to illustrate cases improve internal validity of the research (Miles & Huberman, 1994; Riege, 2003). Both within-case and cross-case analyses were conducted in this research. Furthermore, the nature of causal mapping as the selected method of analysis in this study is based on the graphs; hence the findings are presented by illustrating them using graphs and tables.

- *External validity*: This deals with the power and domain of generalisability of case studies. Some useful techniques may increase external validity. The first technique is the use of replication logic in multiple cases (Eisenhardt, 1989; Riege, 2003). In this study, there are 20 cases that all describe fast-growth firms, which are located in two different countries. The other technique is to compare findings with extant literature (Riege, 2003; Yin, 1994, 2009). In this regard, the present research has developed its findings through using other theories and compared the results with other significant theories in the field.

- *Reliability*: This deals with the extent to which the results can be replicated in other studies. Reliability can be enhanced by using several techniques, such as semi-structured interviews, case study protocol, data recording, full account of theories for any research stages, and finding a meaningful parallelism across data sources (Healy & Perry, 2000; Riege, 2003; Yin, 1994, 2009). This research has made efforts to maintain its reliability, especially through deep understanding of theories in each step of the research, using semi-structured interviews to avoid directing interviews, recording interviews, and triangulating data to support its findings.

4.5 Population and Sampling Frame

“The concept of a population is crucial, because the population defines the set of entities from which the research sample is to be drawn” (Eisenhardt, 1989, p. 537). Sampling of case studies is not similar to traditional statistical sampling such as random selection in quantitative research sampling methods. The purpose of sampling in case study research is to replicate or extend the theory, so random sampling is not necessary (Eisenhardt, 1989).

The selection of suitable cases was done in two phases, where the first phase was the identification of fast-growth entrepreneurial firms and related trends in a 3-year period from 2010 to 2012, based on the Deloitte Fast 50 companies database, and the second phase was an in-depth exploration of suitable cases to start the data collection phase.

Data for this research was collected via semi-structured interviews with entrepreneurs of fast-growth firms and all data was triangulated using other written reports, documents, websites, and other types of information related to the research (Jick, 1979). As Bryman (1988) argues, unstructured interviews where the researcher has minimal interference provide considerable latitude for a participant, making this a favourable technique in data collection. Moreover, for case study research, researchers usually use semi-structured interview protocols (Riege, 2003), which give flexibility to the researcher to draw rich data from the interview. An interview protocol is a directive manuscript for data gathering and analysis (M. Hunter, 2012). It provides convergence in a series of interviews, which is helpful in keeping all interviews along similar lines.

Following Chetty et al.(2013), we developed a cross-country research design and the data collection process took place in two different countries. Firstly, we intended to examine our

framework in an international environment to explore whether these concepts differ between a western and an eastern setting. New Zealand and Iran were selected to represent these perspectives. Second, we opted for two countries in different economic environments (see Appendix 3). According to the World Bank survey on entrepreneurship (The World Bank Group Entrepreneurship Snapshots, 2010), the index of “Entry Density” (i.e. the number of newly registered firms among 1000 working-age populations) for New Zealand is 17.08, while Iran’s index is less than 1. New Zealand’s total score in economic freedom is 82/100 and Iran’s is 42.3/100 (Miller, Holmes, & Feulner, 2012). This suggests two different business cultures and economic environments: one being developed, the other being a developing country. Additionally, there has been no previous fast-growth research comparing New Zealand and Iran and this offers a rare opportunity to gain insights about fast-growth firms in these two countries.

The main issues in cross-country studies are cost, time, methodological changes, and different cultures and languages (Easterby-Smith & Malina, 1999; Teagarden et al., 1995). Thus, the main challenges of this study were culture and language. Chetty et al. (2013) have provided some useful guidelines to overcome challenges in cross-country studies. They suggest that the researcher is allowed to make minor adoptions to ensure that they can overcome these barriers. They also consider “cross-country differences as creating opportunities to explore the unknown, instead of using rigour to stifle creativity and new insights” (p. 8). Therefore, being aware of these differences, we avoided challenges that might lead to questioning the reliability and validity of this research, which will be explained in the data collection section.

Finding confirmatory evidence of fast-growth firms in New Zealand and Iran was the first phase of the study. Before selecting multiple cases from both countries, it was necessary to

identify firms that had specific characteristics that made them appropriate for this study. Given that growth can be viewed in a multitude of ways, our focus on revenue growth and doubling turnover during a 4-year period was considered as our index for fast-growth firms (Littunen & Niittykangas, 2010). Therefore, for the New Zealand participants, fast-growth firms were selected from the Deloitte Fast 50 reports, which are published annually in 150 countries, including New Zealand, during a three-year period (2010 - 2012). The index of fast 50 in New Zealand is based on the operating revenue of the firms, which is related to the core business. All businesses with an operating revenue of NZ\$ 300,000 or more are eligible to be on the list ("Deloitte Fast 50 Entry Criteria," 2014; Deloitte Fast 50: The art of growth, 2010). Over the three-year period, the population comprised high-growth firms from throughout New Zealand (N=150). Potential cases were selected from Christchurch and Auckland, being the biggest business centres in the south and north islands, as well as from the capital, Wellington. From these three cities, 109 businesses were then identified. It is essential to mention that about 15% of the population were duplicated in two or several years in the lists of fast-growth firms, and another 15% were big companies such as banks, insurance companies, telecommunications companies, multinational corporations, and others, where ownership and decision-making processes were not entirely easily known. We excluded these companies to meet the definition of "entrepreneurial firm" (Das & He, 2006; Glancey, 1998; Larson, 1992). We were not able to find adequate information about companies that were sold, merged with other companies, relocated, or no longer operating (especially in Christchurch after some devastating earthquakes). Thus, potential cases were decreased to 73 remaining firms. Table 4.1 shows the potential cases in New Zealand in the three major cities.

Table 4.1. Suitable cases in NZ

City	Suitable population
Auckland	42
Christchurch	14
Wellington	17
Total	73

There is no equivalent database to the Deloitte Fast 50 in Iran. Following the effective research method (Chetty et al., 2013), which includes using all resources available to the researcher, we then sought the assistance of a consulting institute through our networks (Easterby-Smith & Malina, 1999) to obtain a list of fast-growth Iranian (IR) firms. In two major business cities, Tehran and Tabriz, 15 fast-growth firms were identified. Both New Zealand and Iranian fast-growth firms were from various sectors, all were private companies, established and owned by the founding entrepreneur. Distribution of the sample size in Iran is shown in Table 4.2.

Table 4.2. Suitable cases in IR

City	Suitable population
Tehran	12
Tabriz	3
Total	15

4.6 Data Collection Process

Before going through the main stage of data collection, a pilot interview (Yin, 2009) with the entrepreneur of one of the fast-growth Iranian firms was conducted. This provided a clearer

picture of the interview process and structure and helped us to evaluate the interview protocol. After the pilot interview, some minor changes to the interview protocol were made.

Access to nominated firms and individuals that possess first-hand information is a significant issue in qualitative research (Gummesson, 2000). This study was not an exception and it was difficult to access the right people. In order to achieve a better outcome, we designed a three-step process. The first step consisted of a request letter that was sent out to the entrepreneur or founder of the selected firm. This letter was followed by email or telephone conversation to confirm if the entrepreneur or founder was willing to participate in the study. Finally, we scheduled an appointment with those entrepreneurs that were able to take part in this research. Of the 73 firms in New Zealand and 15 in Iran that were contacted, 10 New Zealand firms and 10 Iranian firms accepted the invitation to be part of the study. Nineteen interviews were carried out with the entrepreneurs of the firms, and one interview was conducted with the CEO who was also the co-founder. Nineteen interviews were conducted face-to-face and one was conducted via Skype. The distribution of participants is shown in Table 4.3.

Table 4.3. Number of and distribution of participants in NZ and IR

Country	City	No.	Sum
New Zealand	Auckland	5	10
	Christchurch	5	
Iran	Tehran	8	10
	Tabriz	2	
Total			20

Human Ethics Committee (HEC) approval of the University of Canterbury was sought and in line with this, participant and company names were treated as confidential and were not

shared with other individuals or organisations. Instead, pseudonyms and codes were used in the data analysis. The interviews lasted 60 to 120 minutes and were audio-taped with the interviewees' consent and then transcribed for analysis. The questions were open-ended, allowing the respondents to discuss the issues as long as they wished.

4.7 Data Analysis

Data analysis is a very critical step and a major part of any research. Qualitative data analysis is a procedure of transforming data in a meaningful way that is clear, understandable, insightful, and trustworthy (Gibbs, 2007; Liamputtong, 2009). Qualitative data analysis is better commenced in parallel to data collection. This strategy provides an opportunity to go back and forth between the data gathered and new data. Relating existing data to new data helps a researcher to identify gaps in the data collection and finally collect richer data through interviews or other methods (Liamputtong, 2009).

Data analysis in this study started after the first interview. During analysis, some minor issues in collecting all necessary data were identified. Consequently, the interview questions were revised accordingly (see Appendix 4). The coding process started with ATLAS.ti[®] software and the main analysis was done using Banxia's Decision Explorer[®], a software package that establishes causal connections between qualitative concepts. In the next section, the causal mapping method and its concepts, principles, and tools for analysis are discussed.

The Farsi version of the protocol was refined using the back-translation technique (Brislin, 1970). Using this technique, in order to maintain equivalence of the questions and concepts, the interview guideline was first translated from English into Farsi. A second person who was a native Farsi speaker and had a very good command of English was then asked to

translate them back into English. Both the initial and back-translated versions were the same except for a few differences in terminology.

The interviews were transcribed verbatim, and for the Farsi interviews, we used the back-translation technique again. For some challenging phrases with cultural nuances, we asked a third person who was an English native speaker to check if translated sentences had the same meaning in English. Sometimes we discussed the translations with two other native speakers simultaneously to get the most appropriate translation into English.

4.7.1 Causal Mapping

Causal maps provide a device for exploring meaning-through illustrating not just what the facts/issues are but how they fit together.... Causal mapping provides a structure to the merging of perspectives and is our best chance at avoiding the danger of reducing the complexity of the 'real world' by focusing on only a small number of considerations. (Ackermann & Eden, 2011, p. 48)

A causal map is a cognitive map that illustrates cause and effect relationships between concepts, creating mental models (Axelrod, 1976b; Barr, Stimpert, & Huff, 1993; Eden, 1992). Cognitive mapping was first coined by Edward Tolman in 1948 in psychology (Axelrod, 1976b; Narayanan & Armstrong, 2005). Axelrod (1976a, p. 56) defines a cognitive map as “a particular kind of mathematical model of a person’s belief system.” He explains that a person’s belief is a sophisticated system, and cognitive maps help us to codify how a person makes predictions and decisions. There are two fundamental elements of cognitive maps that are relevant to a clear belief system: concepts and causal beliefs (Axelrod, 1976a). Concepts are considered as variables and causal beliefs demonstrate the relationship between two concepts. There are several types of causal beliefs, which we will discuss later in this chapter.

One benefit of causal mapping is to extract tacit knowledge of entrepreneurs and managers, which can be difficult to express (Ambrosini & Bowman, 2008). By using causal mapping, scholars are able to capture the thoughts of key players in a business on a piece of paper during their research (Narayanan & Armstrong, 2005). During causal mapping, key players of an organisation can follow their process of decision-making in terms of cause and effect, and they are able to see a mapped-out source of success. Applying a visual map gives managers and entrepreneurs an understanding of the sources of success and assists them to manage and nurture those sources of success, which is critical for sustainable growth (Ambrosini & Bowman, 2001, 2005). Many linkages among observations, insights and propositions can be extracted in causal map studies, clearly defining the responses of entrepreneurs and managers to internal and external stimuli. This can help uncover the differences between successful and unsuccessful firms (Barr et al., 1993; Woodside, 2005).

In a causal mapping structure, decision-making and thinking are matters of investigation, and casual mapping is a tool to “make sense of a challenging situation” (Bryson, Ackermann, Eden, & Finn, 2004, p. xii). By using causal mapping, scholars are able to draw not only a holistic picture of a particular situation, but also to link the organisational goals, strategic thinking, and acting. Therefore, causal mapping has been used by some scholars who suggest managers use it for strategy-making to enjoy the benefits of the causal mapping process (See: Ackermann & Eden, 1998, 2011; Bryson et al., 2004; Hodgkinson, Maule, & Bown, 2004; Huff & Eden, 2009). It is suggested that causal maps help by allowing an organisation’s collective ideas as well as the manager’s ideas toward strategic issues to surface (Ackermann & Eden, 2011; Ambrosini & Bowman, 2001; Barr et al., 1993; Bryson et al., 2004). Furthermore, causal mapping can be used as a method for sharing group knowledge in order to get a rich

understanding of team members, tasks, equipment, and situations in an organisation (Mohammed, Klimoski, & Rentsch, 2000).

Another advantage of causal mapping is the versatility of the causal maps (Narayanan & Armstrong, 2005). This enables a researcher to apply causal maps in four distinctive disciplines and contexts consisting of discovery, evocative context, hypothesis testing, and interventions. In a discovery context, researchers can understand the hidden aspects of certain phenomena. In an evocative context, they can investigate a phenomenon that has a theoretical model, but no operational framework, as well as investigate the linkages among concepts. Hypothesis testing is used for studies that consist of hypotheses. An intervention context is applied to facilitate decision-making for a management group in an organisation. Table 4.4 shows the difference of these four concepts.

Table 4.4. Causal mapping in four contexts

	Discovery	Evocative	Hypothesis testing	Intervention
State of Theory	Undeveloped	General theoretical framework available, No operationalisation	Both theory and operationalisation available	Can vary from undeveloped to fully developed
Applicability of causal mapping	Deriving concepts and establishing linkage	Operationalising concepts	Obtaining relevant data	As an input to decision making
Source	Participants in the system	Experts	Relevant population sampling drawn by statistical consideration	Primary stakeholders and convenience sampling
	Diverse source to fully capture the phenomena			

Source: Narayanan and Armstrong (2005)

Regarding the definition provided by Narayanan and Armstrong (2005) and the nature of the present research, the context of this study is evocative, since for most of the concepts of the research, there are frameworks but there is no operationalisation. For example, the concept of

serendipity is presented as a framework in a few studies, but there is no empirical study on the relationship of serendipity and other disciplines in entrepreneurship literature.

4.7.2 Causal Mapping Data Collection Method

Interviews and archival texts are two distinctive data collection sources in causal mapping (Mohammed et al., 2000; Narayanan & Armstrong, 2005). Interviewing (Interactively Elicited Causal Maps - IECM) is a technique developed to assist a participant in articulating their tacit knowledge or beliefs. Text-Based Causal Mapping (TBCM) has been developed to elicit causal relationships in written or printed documents such as annual reports.

Interview protocols ranging from unstructured to dependent upon the research context facilitate the interview processes (Table 4.5). When researchers prepare an interview protocol, they should be aware of several elements, such as their participants, the research context, and the domain of the study. The number of interviews to be conducted is up to the point of saturation (Axelrod, 1976a; Narayanan & Armstrong, 2005). The point of saturation is the point at which the researcher notices that further interviews would not lead to new concepts. Guest, Bunce, and Johnson (2006) believe that saturation occurs at the first 12 interviews. There is no ideal point for the number of cases but 4 to 10 cases work well (Eisenhardt, 1989). Fewer than 4 cases makes it difficult for research findings to be generalised and more than 10 cases submerge the researcher with a volume of data (Eisenhardt, 1989). This has been confirmed in several studies such as Sarasvathy (2001), Morrish (2008) and Chetty et al. (2013). In the present research, after reaching 14 interviews, we realised that we were not able to extract any more new concepts and codes, i.e. we reached the saturation point. However, due to the comparative nature of the study

we continued interviewing to ensure finding confirmatory evidence. Given that this research is evocative, a semi-structured interview protocol was developed.

Table 4.5. IECM data collection methods

Research Context	Data Collection Method
Discovery	Unstructured interviews
Evocative Context	Unstructured or semi-structured interviews
Hypothesis Testing	Semi-structured or structured interviews
Intervention	Structured interviews

Source: Narayanan and Armstrong (2005)

4.7.3 Causal Mapping in Management and Entrepreneurship

The use of causal mapping in organisational science is growing because it assists scholars to acquire better insight of organisational issues (Narayanan & Armstrong, 2005). Causal mapping enables the researcher to emphasise “how” something works (in an organisation) rather than “what” works within an organization (Ennis, 1999). The first use of causal mapping dates back to 1977 when it was first used by Weick and Binkhorst in examining the Utrecht Jazz Orchestra, and the second use of it was in 1984 in a study on cause-effects beliefs by Hagerty and Ford (Narayanan & Armstrong, 2005). Reviewing the history of causal mapping reveals that three substantial streams that are widely applied for solving organisational issues have emerged since 1977. In the first stream, quantitative disciplines such as industrial dynamics and organisational science have used causal mapping. An international convergent was reached in the second stream to encourage the researcher to use this method. The third stream uses computerising, which has helped researchers to map out issues easier than decades ago (Narayanan & Armstrong, 2005).

Today causal mapping is widely used in management (Hays, Bouzdine-Chameeva, Goldstein, Hill, & Scavarda, 2007) and entrepreneurship, particularly to explore processes of decision-making (Woodside, 2005). Consistent with managerial issues, growth is one of the widely researched areas studied using causal mapping (Ennis, 1999; Jenkins & Johnson, 1997; Woodside, 2005). Scholars have applied causal connections to map out the processes, reasons, and the role of key players in decision-making in successful and unsuccessful firms.

4.7.4 Constructing Causal Maps

Before drawing a causal map, it is necessary to understand the terms used in causal mapping. Causal mapping is a series of causal assertions that are shown in nodes and arrows, which demonstrate the relationships among all concepts on the map. According to some scholars, e.g. Axelrod (1976b), Barr et al. (1993), Ambrosini and Bowman (2008), Ackerman and Eden (2011) and Narayanan and Armstrong (2005), the causal mapping terminology is defined as follows:

Causal statements: Any assertions and claims from interviewees, as well as the text that is being studied.

Concept: An elucidated word or phrase that clearly captures what interviews or texts carry.

Causal map codes: Pre-defined explanations of the relationship between two concepts in a mapping process.

Construct: A group of concepts that are similar in meaning.

Causal link: The link between two concepts that convey a relationship based on coding schema.

The definitions above help the researcher to understand the structure of causal mapping and create a relevant and worthy map. There are several mapping processes that are suggested by scholars to extract the hidden layers of what is said in interviews or what is written in texts. Generally, a four-step guide is helpful to map out the verbal and written words from an interview or report. The first step is to identify causal statements that capture a relationship between two concepts. Words such as “if-then,” “because,” “so,” “think,” “know,” and “believe” convey a cause and effect relationship between two concepts (Axelrod, 1976b; Narayanan & Armstrong, 2005). After separating the causal statements, the next step is to identify the type of relationship between the concepts. This is called codifying the links. At this stage, the researcher tries to find a proper type of relationship and also the directionality between the two concepts. The direction could be either unilateral or bilateral. Based on initial works on causal mapping, a primary coding schema is provided by some scholars and according to the content of the research, some scholars accomplished the coding signs to cover all requirements of a worthy map. In Table 4.6 a complete coding category based on Barr et al. (1993) and Woodside (2005) is presented.

Table 4.6. Coding strategy

Symbol	Definition
+	Positively affects
-	Negatively effects
A	May or may not be related to, affects indeterminably
M	Affect in some non zero way
O	Does not matter for, has no effect on, has no relation to
=	Is equivalent to, is defined as
E	Is an example of, is one member of
C	Choice criterion
\ominus	Will not hurt, does not prevent, is not harmful
\oplus	Will not help, does not promote, is of no benefit to

Source: Barr et al. (1993) and Woodside (2005)

Building a primary causal map is the third step. In this stage the researcher is able to elicit all key concepts, establish the relationships among them, and make a primary map. As the last step, tidying up and finalising the map has to be considered. There are more or less steps depending on the type of research, but this four-step process is the generally accepted process of mapping (Narayanan & Armstrong, 2005).

4.7.5 Constructing Causal Maps in the Present Research

After codifying all interviews, we started to map out all interviews using the Decision Explorer[®] software. We used the standard codes plus one code specifically created in this thesis to better connect the concepts. Our additional code was “Lead” with the abbreviation of “L”. This code shows that one concept leads to the other concept. Table 4.7 shows the coding category in this study.

Table 4.7. Coding category in this research

Symbol	Definition
+	Positively affects
-	Negatively effects
A	May or may not be related to, affects indeterminably
M	Affect in some non zero way
O	Does not matter for, has no effect on, has no relation to
=	Is equivalent to, is defined as
E	Is an example of, is one member of
C	Choice criterion
⊖	Will not hurt, does not prevent, is not harmful
⊕	Will not help, does not promote, is of no benefit to
L	Leads to

4.7.6 Reliability and Validity of Causal Relationships

Asking other coders to map out the interviews is a method of testing reliability of causal maps. The extent of agreement between coders in terms of creating concepts and coding the relationships can be a standard method of measuring reliability (Axelrod, 1976b; Barr et al., 1993; Woodside, 2005). Previous studies have used one or two additional coders, checking that there is agreement between them, in order to build relationships among concepts. The percentage of agreement should be at a satisfactory rate. Coders in previous studies were trained before starting the analysis. In this study, some parts of the map were chosen for a reliability test. After training another coder, who was a PhD student familiar with the managerial and marketing concepts, she was asked to map out two of the interviews. An agreement rate of 86% was observed. This seemed a satisfactory rate, similar to other studies with rates of 93% and 88% (Barr et al., 1993; Woodside, 2005).

4.7.7 Causal Map Analysis

The transcribed texts from interviews were mapped out and codified according to three main constructs in this research using the Decision Explorer[®] software package. Decision Explorer[®] is recommended for analysing causal maps (Cropper, Eden, & Ackermann, 1990). The instructions for working with the software and undertaking a proper analysis are available from Ackermann and Eden (2011), as well as from the user guide of the software package. As some of the commands and analysis were widely used in this research, we explain three of them in this section.

Domain and central analyses: Domain analysis refers to finding busy concepts. Busy concepts are those that have many incoming and outgoing links, showing the importance of that

concept for the researcher. Central analysis deals with concepts with many peripheral concepts surrounding them. The structure of the causal map could be analogised to a molecular structure with many nodes and links. In such a system, some nodes play the role of central concepts with many nodes connected to them. It is worth noting that central concepts are different from busy concepts. In busy concepts, the software calculates the links of a concept while in central concepts, being in the core is considered. To find a central concept the software runs a mathematical formula and calculates the rate of being central. The software provides two integer numbers for every single concept. The higher the number, the more central or domain the concept will be. This distinction is shown in Figure 4.1; in a causal map, concept A is more *domain* than concept B, but B is more *central* than A.

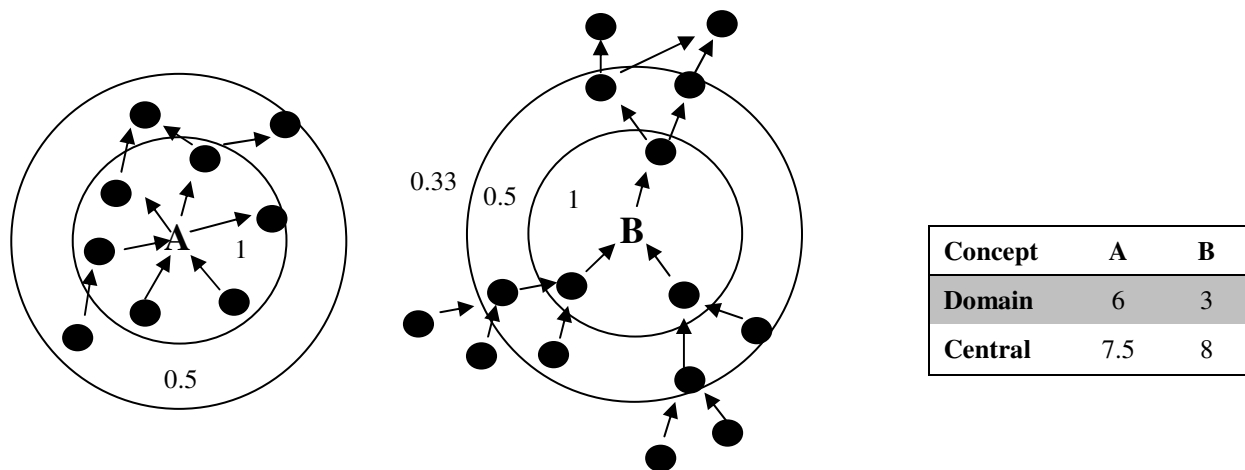


Figure 4.1. Domain and central concepts

Source: Ackermann and Eden (2011)

Clusters: Cluster is a useful command for slicing the model into small chunks to get rid of other irrelevant concepts in a special area. When the model gets bigger because of a large amount of concepts, the researcher cannot focus on the relevant concept(s) of his analysis, so he breaks down the model into small groups of chunks to see how one concept relates with others.

4.8 Participants' Demographics

Although not intentional, all the participants in this study were male. The average age of entrepreneurs at the time of the interview was 38 (with a minimum age of 29 and maximum of 51). Four of them (2 from New Zealand and 2 from Iran) had a previous entrepreneurial background. Fourteen (8 from New Zealand and 6 from IR) had related background from their previous jobs and 7 from New Zealand had worked overseas in related and unrelated fields.

Table 4:8 illustrates the demographic information of all participants. On average, the firms had been operational for 6.5 years when the interviews were conducted (with a minimum of 2 and maximum of 12 years). The fast-growth firms were from various sectors; all were private companies; some of them served in business-to-business (B2B) markets, and some operated in the business-to-consumer (B2C) area (Table 4.9).

Table 4.8. Description of entrepreneurs

	Code*	Core Business	Age/gender of entrepreneur	Education of Entrepreneur	Entrepreneurial background	Related previous background
1	TRO	Producing different kind of tools (hand, air, power, wood working tools)	37-M	High school diploma	Apprenticeship and broker in tools market	Yes
2	TBE	Confectionary cream production	38-M	Masters degree in Architecture	No	No
3	TDI	Review and Online shopping website (Computers and digital products)	32-M	MBA degree/Bs in industrial engineering	No	No
4	THO	Fresh and frozen fruit distributor to juice bars	30-M	MBA degree/ BS in mechanical eng.	No	Yes
5	TME	Industrial paint research institution	38-M	Master degree in Polymer engineering (Paint technology)	No	No
6	TTM	Marketing research, consulting and training company	46-M	MBA degree/BS in mechanical and agricultural eng.	No	Yes
7	TYA	Wholesale food distributors /Raw material supply distributor to restaurants	32-M	BS in animal science/ Associate degree in meat industry	Yes	Yes
8	TAL	Advertising agency and advertising gifts	37-M	MSc mechanical engineering	No	No
9	TAR	Construction company	40-M	BSc in civil engineering	No	Yes
10	TAZ	Construction company	51-M	High school diploma	Yes	Yes
11	COP	Asset management consulting and outsource services	39-M	Mechanical engineering degree and MBA degree	No	Yes
12	CPN	Full service design studio	30-M	Left high school Business management diploma	No	No
13	CKE	Pet food manufacturing	50-M	-	No	Yes
14	CET	Energy efficient lighting manufacturing and supplier	38-M	Withdraw mechanical engineering from Polytech.	No	Yes
15	CST	Dairy processing	43-M	PhD in Animal science	Yes	Yes
16	ASM	Experiential marketing and activation staff	29-M	Bachelor of Business	No	Yes
17	ALE	Early childhood education and care provider	49-M	Bachelor of Education	No	No
18	ACL	IT services consultancy	46-M	Bachelor of Computer Science and Chemistries Post-Graduate Diploma in Management	No	Yes
19	AIY	Apartment trading company	32-M	Left school	No	Yes
20	ADK	Digger/Dozer specialist	29-M	Business certificate	No	Yes

*Names were changed to codes to ensure anonymity

Table 4.9. Description of fast-growth firms

	Code	Core Business	Year founded	No. Of Employees	Family Business	Partner	Markets	Type of Market	Growth
1	TRO	Producing different kind of tools (hand, air, power, wood working tools)	2001	72	Yes	No	Iran	B2C	200% in last four years Average: 50% each year
2	TBE	Confectionary cream production	2008	28	Yes	Yes	Tehran, and 5 other cities	B2B	600% in 2010
3	TDI	Review and Online shopping website (Computers and digital products)	2006	Approx.70	Yes	No	Iran	B2C	Average: 100% every year in past 6 years
4	THO	Fresh and frozen fruit distributor to juice bars	2010	Approx. 10	No	No	Tehran	B2B	600% in 2012
5	TME	Industrial paint research institution	2002	32 Full time 75 Academic board	No	No	Iran, Iraq, Emirates, Georgia	B2B	300%-in past couple of years- the year not declared exactly
6	TTM	Marketing research, consulting and training company	2005	25 Full time 30 Academic board	No	No	Iran	B2B	1000% in 8 years
7	TYA	Wholesale food distributors /Raw material supply distributor to restaurants	2009	25	Yes	No	Tehran	B2B	900% in past 3 years
8	TAL	Advertising agency and advertising gifts	2006	30	Yes	No	Iran	B2B	About 100% every year in past 6 years
9	TAR	Construction company	2006	5 full time 70 part time	Yes	No	Iran	B2B	600% in 2011
10	TAZ	Construction company	2000	6 full time 50 part time	No	No	Iran- Kyrgyzstan	B2B	400% in 2010
11	COP	Asset management consulting and outsource services	2004	10	No	Yes	New Zealand, Australia	B2B	227% in 2010
12	CPN	Full service design studio	2007	19	Yes	No	Christchurch	B2B	195%, in 2011, 208% in 2012
13	CKE	Pet food manufacturing	2006	25	No	Yes	NZ and 19 Countries	B2C	641% in 2010, 797% in2011, 163% in 2012
14	CET	Energy efficient lighting manufacturing and supplier	2005	13	No	Yes	New Zealand	B2B	1081%in 2010
15	CST	Dairy processing	2007	130	No	Yes	Export to 40 countries	B2B	165% in 2011, 468% in2010, 608% in 2009, 644% in 2008
16	ASM	Experiential marketing and activation staff	2006	3 fulltime-300 contracted	No	No	New Zealand	B2B	216.31% in 2012
17	ALE	Early childhood education and care provider	2002	Approx. 700	No	Yes	New Zealand	B2C	159.29% in 2011
18	ACL	IT services consultancy	2007	85	No	Yes	New Zealand, Australia, US, UK	B2B	831.94% in 2010 234.86% in 2011
19	AIY	Apartment trading company	2009	8	No	No	Auckland	B2C	370.83% in 2012
20	ADK	Digger/Dozer specialist	2004	6-8	No	No	North Auckland	B2B-B2C	170.36 in %2011 160.54 in %2012

4.9 Industry categories

Using the ANZSIC¹ and Iranian Industrial classification, participating fast-growth firms were categorised into the eight groups shown in Table 4.10. About one-third of our participants belonged in the “Professional, Scientific and Technical Services” category. Table 4.11 depicts another categorisation considering the firms' clients. Except for one of the firms, which operated in both the B2B and the B2C markets, there were 14 firms in the B2B and 5 firms in the B2C market.

Table 4.10. Industry classification of fast-growth firms

Industry							No. of firms
Professional, Scientific and Technical Services	TME	TTM	TAL	COP	CPN	ASM	6
Food industries	TBE	CKE	CST				3
Construction	TAR	TAZ	ADK				3
Wholesale Trade	TYA	THO	CET				3
Online shopping and IT services	TDI	ACL					2
Manufacturing	TRO ²	CET ³					1
Education and Training	ALE						1
Rental, Hiring and Real Estate Services	AIY						1
Total							20

Table 4.11. Customer type of fast-growth firms

	NZ	IR
B2B	7	8
B2C	4	2

¹ The Australian and New Zealand Standard Industrial Classification

² TRO outsources its production. It possesses its own brand.

³ CET is a manufacturer and supplier.

4.10 Analysis Criteria

Defining the criteria for analysing each interview and connecting it to the coding schema was one of the crucial steps in data analysis. As stated above, this research encompasses three major distinct constructs that all have their own literature. These three constructs are integrated as a process of growth in entrepreneurial firms. Therefore, specific criterion for analysis was needed to assist the researcher in the coding process to draw causal maps. Due to the qualitative nature of the study, the content and the language the participants used to describe their activities was analysed in order to understand the relationship among all disciplines. Thus, the interviewee's statements, words use, and even their memories or diaries were guides for the researcher to create a proper causal map.

4.11 Reporting

“Reporting of a case study means bringing its results and findings to closure” (Yin, 2009, p. 165). This is one of the challenging parts of the research because there is no invariant form for it. Yin (1994) recommends that researchers start to draft their cases from the beginning of data analysis rather than at the end of research because writer's cramp may occur, and it would be difficult to compose a good report and conclusion.

Despite the lack of a pre-designed format for reporting, there are some recommended frameworks for reporting case studies, enabling researchers to organise their study. A single narrative format in which researchers start to report the case in a manuscript format with some graphs and tables is recommended for a single case. A multiple-case version is the second format for reporting and creating outcome. The last type of reporting format is devoted to multiple case studies. The cross-case analysis format is similar to the multiple-case version, but researchers do

not devote a chapter for each case and start with cross-case analysis. Yin (2009) has also presented six types of illustrative reporting structures that are helpful to compose the report. Linear analytic, comparative, chronological, theory building, suspense, and unsequenced structures are applicable to case study research.

In the present study, with respect to the conceptual model, a cross-case analysis format was employed. Moreover, the writing logic was based on theory building structure. This is consistent with the purpose of study, which is exploratory in nature. This approach follows the logic of theory building, in which each chapter of the report brings out a new argument in the realm of previously reviewed literature. Thus in the following chapters, we will start the analysis of the cases divided into three major constructs (serendipity, effectuation, and EM), from serendipity to growth. Each chapter is concluded with relative findings, results, and discussions.

4.12 Conclusion

This chapter has discussed qualitative paradigm and case study methodology. Case study was chosen as the appropriate approach to address the research questions. Multiple cases were investigated based on the conceptual model developed specifically for the study. The data collection method used was the semi-structured interview, and this was triangulated with written reports and documents from the cases.

Considering the nature of the research and its conceptual framework, causal mapping was used in analysing the data that was gathered from interviews and desk research. Concepts and their linkages, based on the coding schema, shaped the causal map of each case. It is notable that causal mapping attempts to bridge cause and effect relationships among concepts, and the goal was to map out what had caused the growth of each firm. Map-making was done using the

Decision Explorer[®] software package, which was helpful in analysing sophisticated and complicated maps with many concepts.

Chapter Five: Exploration Phase

Serendipity: Evidence from the Front Line

5.1 Introduction

This chapter reports the findings for the first construct in this study. The chapter is divided into two sections. The first deals with the findings on the role of serendipity in fast-growth firms. It explores the influence serendipity has on business as well as what triggers the occurrence of serendipity. This is done through mapping the growth path of each firm using the causal mapping method to illustrate what events took place during the growth phase of each firm. The second section looks at entrepreneurs' attitudes towards serendipity in business. It considers the views entrepreneurs have about serendipity in their businesses. Finally, we conclude the chapter with a summary of findings, describe how and why serendipity occurs and how it affects opportunity exploration in fast-growth firms.

5.2 Findings: The Role of Serendipity in Fast-Growth Firms

Drawing a causal map of each firm was the first step of analysis (see Appendix 1). The maps helped to visualise the history of the firms, decision-making processes, growth trajectories, milestones, turning points, etc., and enabled us to gather a broad picture of what happened in each firm since its inception. Cluster analysis of the maps allowed for a better understanding of each map. In Banxia's Decision Explorer[®] software, the cluster command is useful for slicing the causal maps into smaller chunks to remove non-relevant concepts when finding special requests. When the model gets bigger because of a large number of concepts, the researcher cannot focus on the relevant concept(s) of the analysis, so the map is broken down into small chunks.

The cluster analysis showed evidence of the existence of serendipity and its indirect impact on the fast growth of the investigated businesses. Eight out of ten fast-growth firms in NZ and nine out of ten from Iran experienced significant serendipities (see Table 5.1).

Table 5.1. Significant serendipity in investigated firms

NZ	Serendipity	Significance of serendipity	IR	Serendipity	Significance of serendipity
COP	√	4	TRO	√	3
CPN	√	4.5	TBE	√	4
CKE	√	4	TDI	√	5
CET	√	4	THO	√	5
CST	√	3	TME	√	4.5
ASM	√	5	TTM	√	4.5
ALE	√	4	TYA	×	1
ACL	×	1	TAL	√	5
AIY	√	4	TAR	√	5
ADK	×	1	TAZ	√	4

Results showed that serendipity is an integral element of business in entrepreneurial firms. All participants believed in some form of serendipitous events on a day-to-day basis, including the entrepreneurs of the other three firms that had not experienced significant serendipity. These entrepreneurs believed that their own roles in being successful were more salient than serendipity, but conceded that serendipity could not be ignored in their businesses. It is important to note that entrepreneurs talked about serendipity in their own language and used the words *luck*, *chance*, *fortune*, and *fate* interchangeably. All the participants saw serendipity as a business fact and believed that they needed to have an element of luck, chance, or fortune to be successful.

“You still do need an element of fortune, you know, on top of all of that.” -ALE

Serendipities occurred in each firm rated from 1 to 5, where 1 is low and 5 is a high incidence of serendipity. The significance of serendipity was based on our understanding and interpretation of the growth story of each firm and the impact of serendipity on firms in terms of changing direction, finding great ideas, entering a new market, etc. Consequently, these findings lead us to accept proposition P_{1a}. that *serendipity is a source of opportunity exploration*.

5.2.1 A New Pattern of Serendipity

Of the three well-known patterns of serendipity, Galilean serendipity (G) was one of the most common patterns we observed in the firms we investigated. For example, TBE's main competitor encountered problems, so TBE suddenly faced more demand for its products and gained new customers without actively planning to do so. In other examples, a new agreement between the New Zealand government and another country opened a big new market for CST and the Rugby World Cup was a huge opportunity for ALE. TME's entrepreneur was asked to join his friends to start a business. After a few years, he took ownership of the business and developed a new business model. All these examples reveal that Galilean serendipity or unexpected opportunities can happen any day in all businesses, suggesting Galilean serendipity does indeed occur in businesses.

Archimedean serendipity (A) was another pattern that we noticed. This pattern was detected in only one firm. When TBE had problems producing high-quality products and selling them, TBE's entrepreneur looked for professional production and marketing consultants to help the firm solve a production problem and improve marketing performance. Through his networks and a chance encounter at his university, he found consultants who had a very significant impact on improving the company's quality of productions and marketing.

We did not see any Colombian serendipity in the firms we investigated. We conclude that most of the occurrences of serendipity in the investigated firms followed the Galilean pattern, as many of the accidental opportunities were unsought and entrepreneurs did not expect to find them.

In addition to traditional serendipity patterns, we identified an emerging pattern that was different from previous patterns in scientific discoveries. We labelled this pattern *Entrepreneurial Serendipity (ES)* (see Table 5.2).

Table 5.2. Serendipity patterns in investigated firms

NZ	Pattern	Type of Serendipity	IR	Pattern	Type of Serendipity
COP	ES, G	Idea of running the business (ES) Some profitable projects (G)	TRO	G	4 years free guarantee for his products (G) Support of his employer/was not to run the business (G)
CPN	ES, G	Running the business (ES) Earthquake brought them big projects (G)	TBE	A, G, ES	Finding professional consultants (A) Main competitors fell in problem (G) Went to top segment of the market (ES)
CKE	ES, G	Big order from the US (ES) Found a new partner to invest on firm (G)	TDI	ES	Found the idea of running the business (ES)
CET	ES, G	Running the current business (ES) Some profitable projects (G)	THO	G, ES	The first idea of the business (G) Expanded the business (ES)
CST	G	Finding a new market (G)	TME	G, ES	Offer to join the company (G), Some big contracts (ES)
ASM	G	Rugby world cup in NZ (G) Entering the industry (G)	TTM	ES	The first project (ES)
ALE	G	Word recession caused to expand the business (G)	TYA	×	No significant serendipity
ACL	×	No significant serendipity	TAL	G, ES	Idea of running the business (G) Expansion of the business (ES)
AIY	G, ES	Finding a potential business partner (G) Changed the business model (ES)	TAR	ES	The first project (ES)
ADK	×	No significant serendipity	TAZ	G	Renting asphalt factory (G)

Key:

G: Galilean serendipity

C: Colombian serendipity

A: Archimedean Serendipity

ES: Entrepreneurial Serendipity

To better understand this new pattern, we must review the other patterns to show how Entrepreneurial Serendipity differs from them.

Archimedean serendipity involves looking for some specified opportunity and finding that specified opportunity through serendipity. *Columbian serendipity* involves finding an opportunity when you are looking for some other specified opportunity. *Galilean serendipity* involves finding an unspecified opportunity that you were not actively seeking through knowledge or experience. We converted the concept of serendipitous discovery in terms of opportunity exploration in entrepreneurship, and following Figueiredo and Campo (2001), we symbolised these patterns in this way:

Archimedean serendipity: $SPO_{req} \longrightarrow SPO_{fnd}$

Columbian serendipity: $SPO_{req} \longrightarrow AO_{fnd}$

Galilean serendipity: $NLO \longrightarrow AO_{fnd}$

Key to read formulas:

SPO: Specified opportunity

AO: An Opportunity

NLO: Not looking for opportunity

req: Required

fnd: Found

Results showed that exploring new opportunities is not always a specified process for entrepreneurs. The nature of entrepreneurial firms drives entrepreneurs to look for new opportunities constantly, to expand the current business and sometimes run multiple businesses. Archimedean and Columbian serendipity happens when entrepreneurs look at starting a very specific firm or exploring a particular opportunity. However, in most cases, entrepreneurs do not have any clear idea about the opportunity they are looking for. At the back of their minds, they are looking for ideas or opportunities that will enable them to have a new business, and in some cases, it does not matter what it will be. For example, TDI's founder was looking for any business opportunity, and by chance, he found a website when he was trying to purchase a camera, giving him the idea to run his own business. Other examples can be seen in other firms

such as CET and TAL. The founders of these two firms were looking to start their own businesses, without any specific ideas as to what those businesses would be, when they received offers to join a business or start a joint one. In another example, TTM's entrepreneur was looking for a business opportunity. While teaching for an MBA student, he was asked to run a big marketing research project for an automobile company whose sales manager was in the class. Consequently, he serendipitously signed his first contract. This is consistent with Lam and Harker's (2013) finding that entrepreneurs wait for the right opportunities to explore and they believe that the right opportunity appears at the right time.

"You have to think really positively and then good things will come to you and you have to work hard and good things will come to you."-ASM

"During the former president's tenure I was invited to take a governmental position. I did it for three years, but again I realised that I was not made to do governmental stuff ... so I had it in my mind that I should have an independent business for myself."-TTM

This new pattern, Entrepreneurial Serendipity, was also observed among the participants who were bored in their previous job and were looking for opportunities to be their own boss. These entrepreneurs did not have a particular idea about what their business should be. They just waited for what they perceived to be the right time to explore any opportunity that came along.

"Sometimes I get frustrated because I waited so long to do something like this [my own business] so I feel like I've wasted all these years and I could have done this when I was 20 but wisdom tells me that you can't, you know, you have to reach a certain stage in life."-ALE

“I didn’t like working for others, I didn’t like being an employee, I mean, I can do more than work as an employee for others. I thought one day I could get myself a job and work with my own management and my own ideas”-TAR

This distinct pattern of serendipity emerges when entrepreneurs are determined to find any unspecified opportunity to start their own business and through a serendipitous circumstance, they find an interesting or appropriate opportunity to do so. This opportunity may be different from what they think and even different from their previous career. Archimedean and Columbian serendipity involves seeking a specified opportunity, while Galilean serendipity involves finding an opportunity despite the fact that you are not seeking any opportunity at all. This new pattern, in contrast to the others, involves *seeking an unspecified opportunity* and finding one. Since this pattern deals with finding new entrepreneurial opportunities, we name it Entrepreneurial serendipity (ES) and therefore, we symbolise this new pattern such that:

Entrepreneurial Serendipity: $ATO_{req} \rightarrow AO_{fnd}$

Key to read formulas:
AO: An Opportunity
ATO: Any Type of Opportunity
req: Required
fnd: Found

The four types of serendipity are demonstrated in Table 5.3.

Table 5.3. Serendipity patterns

Pattern	Searched opportunity	Explored opportunity
Archimedean	SPO_{req}	SPO_{fnd}
Columbian	SPO_{req}	AO_{fnd}
Galilean	NLO	AO_{fnd}
Entrepreneurial Serendipity	ATO_{req}	AO_{fnd}

Entrepreneurial Serendipity also contains the three elements of serendipity from Dew's (2009) conceptual model: knowledge, search, and contingency. In considering these elements, we expand Dew's conceptual framework with respect to the three components and present them in two-dimensional and three-dimensional perspectives. The first perspective is the role of knowledge and search in serendipity (Figure 5.1).

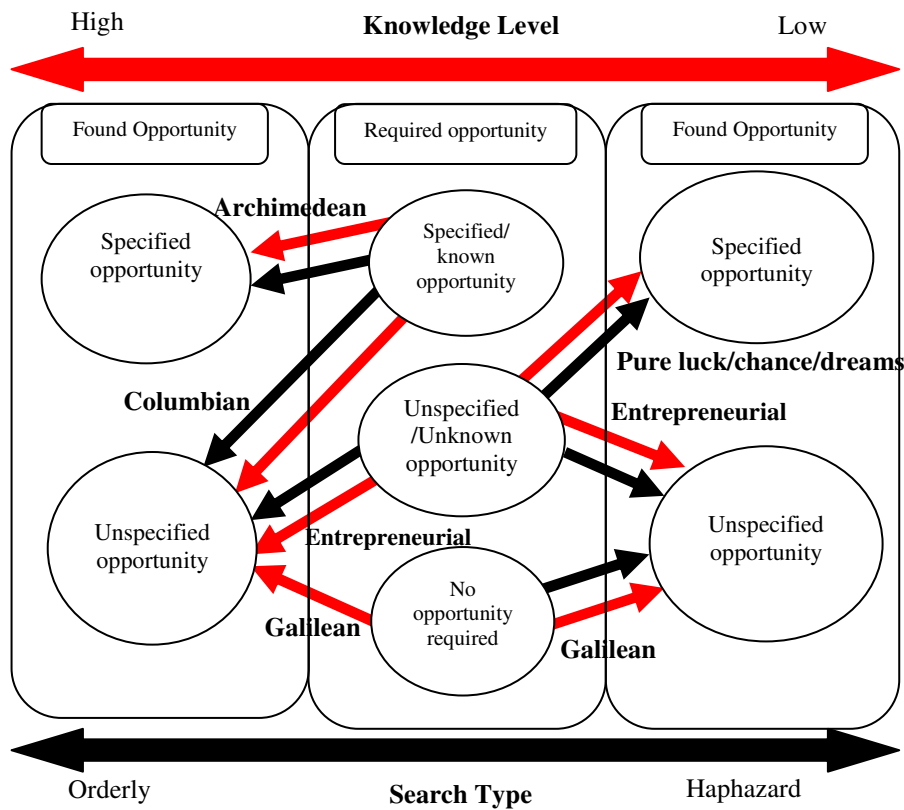


Figure 5.1. The role of knowledge and search in serendipity patterns

Figure 5.1 shows the perspective of the role of knowledge and search in serendipity patterns. It illustrates these patterns of opportunity exploration in the context of required and found opportunities. The amount of knowledge an entrepreneur has about their business is

depicted as a continuum, with high levels of knowledge at one end and low levels of knowledge at the other. Sometimes, the current business is relevant to entrepreneurs' knowledge and experience. Other times, entrepreneurs enter a business that is not related to what they did in the past and for which they have little knowledge of. For example, some business founders, like those of CPN, TBE, and TAL, entered their current business with low levels of knowledge, while others like COP, TRO, TAR, and CET had relevant knowledge and experience (see Chapter 6 and Table 6.3). Knowledge can lie dormant, at the back of an entrepreneur's mind, unused and unconsidered for a period of time. This dormant knowledge is likely to become explicit through any contingency such as a meeting up with a friend or finding an idea after visiting a website. We have some good examples of this in our findings. The founder of TDI got the initial theme of his business from a website. ALE's entrepreneur graduated from university with a degree in education, but never used the degree and knowledge in the fifteen years that he played, taught, and coached rugby.

In Figure 5.1, search type, the second significant element of the model, is shown on a continuum from orderly to haphazard. An orderly search indicates an organised and purposeful search to find a specified or unspecified opportunity. A haphazard search, on the other hand, represents finding something accidentally when you have not prepared yourself for the search or have not set any search criteria.

"I came back from the UK with a mind-set that I was going to do something other than work for someone...and I just had a go at a couple of things, like the software thing. I went looking for what opportunities there were, and when Ralph came to me and said 'Hey, I've been offered this job.... I reckon we should set up as the agent.' He knew I was

looking, so I told him ‘Oh, look, I really, I don’t want to go and work for someone, I want to do this.’”-CET

Therefore, Entrepreneurial Serendipity is characterised by discovering an unspecified opportunity through high or low knowledge that was searched for in a haphazard or orderly manner. In this proposed model, we develop and position other patterns of serendipity in entrepreneurship. Archimedean serendipity involves finding a specified opportunity serendipitously with orderly search and high knowledge. Columbian serendipity occurs when an unspecified opportunity is found with orderly search and a very high level of existing knowledge. Discovering an unspecified opportunity through serendipity with no or haphazard unplanned/purposeless search and either high or low knowledge illustrates Galilean serendipity.

There is another relationship here in Figure 5.1, which is finding a specific opportunity when unspecified opportunity is required. There is a contradiction in its essence, which is vague. How one can find a specific opportunity when an unspecified opportunity is required? We argue that this occurs when one has some specific goals or dreams and realises them with some haphazard search and with little knowledge. This is where luck or chance occurs.

Figure 5.2 shows another perspective of serendipity patterns based on the three elements of Dew’s framework. It illustrates serendipity patterns in terms of opportunity seeking. The illustration encompasses two axes. The horizontal axis represents the opportunity an entrepreneur looks for, or the searched opportunity. The vertical axis represents the explored opportunity, or the opportunity an entrepreneur finds. Both axes represent an opportunity’s level of specification on a continuum, with one end representing a highly specified opportunity and the opposite end representing a highly unspecified opportunity. We distinguished the type of serendipity

entrepreneurs experienced in their businesses by comparing the opportunities entrepreneurs were looking for with the nature of the serendipitous opportunities they explored.

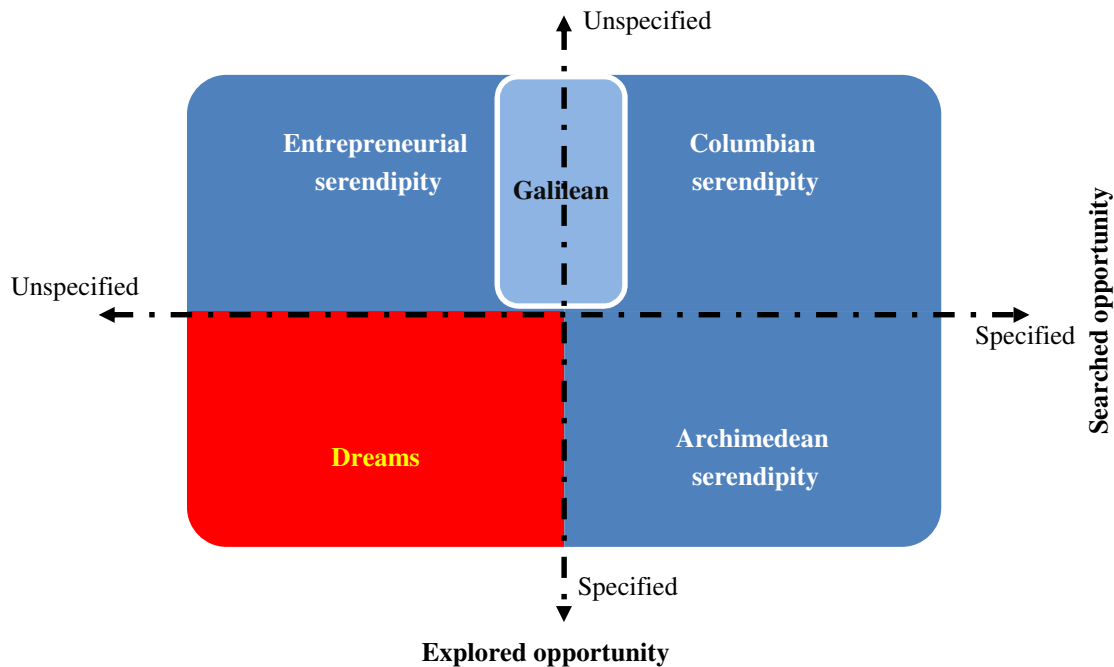


Figure 5.2. Serendipity perspectives

It is notable that in Figure 5.2 Galilean serendipity is around the vertical axis because there is no search involved. We also see an area where opportunity that is searched for is unspecified, but the found or explored opportunity is a specified one. This area, Dreams, is shown in red. We do not have sufficient data about this zone, but in this zone, pure luck or chance occurs. One may have some specific goals or dreams and they may come true over the years. For example, one dreams to be rich when they are child, and after many years, by finding opportunities and exploiting them, they achieve their goal. It is similar to the occurrence of pure luck/chance in Figure 5.1. This zone is an area for more research in the future and could be a zone where dreams come true.

“I came from a family, a solo parent, very limited means and so as a youngster we probably didn’t have some of the things that basically a good middle class family should have. So as a youngster I was very obsessed with you know, when I was an adult, that I wouldn’t be in a situation where I couldn’t give my kids anything that they needed to have to be able to have a full life... the biggest influence in my life was when I was 20 years old. I read a book... that was my bible and I studied that constantly for a while and did all the exercises... I started getting into real estate. When I was 21, I bought my first property and started to really focus on that... I started looking at the apartment market and then in 2007 made my first purchase.”-AIY

Figure 5.3 shows the interface between the search type and the explored opportunity, or the opportunity the entrepreneur finds. It illustrates the opportunity an entrepreneur explores and the logic behind the search or the manner in which searching was done. Each of the four quadrants encompasses one or more serendipity types. Archimedean serendipity falls in quadrant one, where an orderly search is used and a specified opportunity is found. Entrepreneurial and Columbian serendipity, which are both characterised by an orderly search and the discovery of an unspecified opportunity, falls in the second quadrant. Entrepreneurial and Galilean serendipity, both characterised by the use of haphazard search and the discovery of an unspecified opportunity, fall in quadrant three. The fourth quadrant represents pure luck and chance, the area where a specific opportunity is found with haphazard search. This is where entrepreneurs find specific goals and realise their dreams without actively searching for them. This is where pure chance or luck takes place.

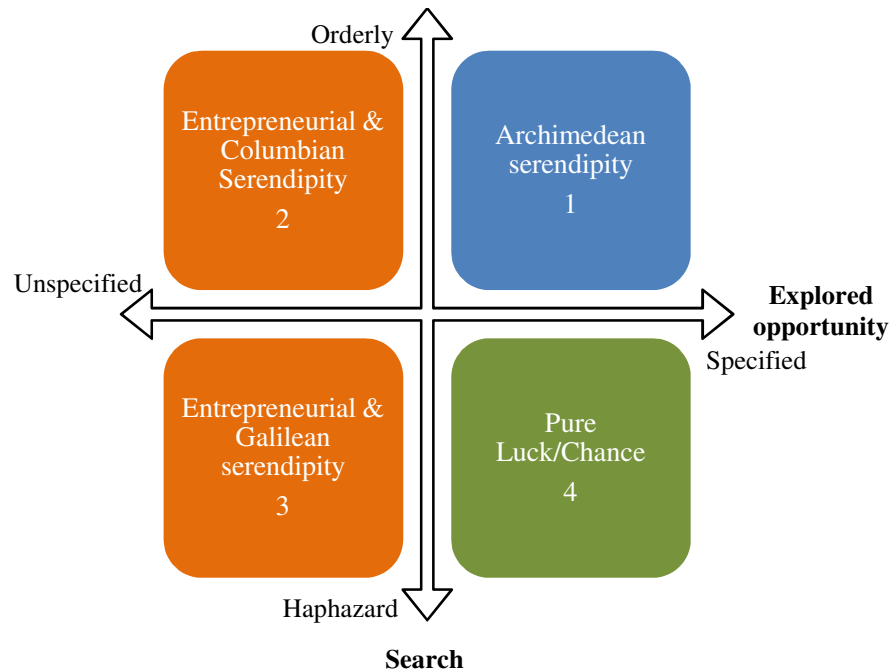


Figure 5.3. Another perspective of serendipity

We then merged the elements at work in these models to shape a universal figure to illustrate the role of search, knowledge, and explored opportunity in entrepreneurship according to our findings. In order to gain a clear view to improve our understanding of serendipity, we developed a 3D perspective (see Figure 5.4) with the presence of the aforementioned factors. The results showed the following patterns of serendipity:

Archimedean serendipity: where knowledge is high, search is orderly, and the explored opportunity is specified.

Columbian serendipity: where knowledge is high, search is orderly, and the explored opportunity is unspecified.

Galilean serendipity: where knowledge is high or low, search is haphazard, and the explored opportunity is unspecified.

Entrepreneurial Serendipity: where knowledge is high or low, search is haphazard or orderly, and the explored opportunity is unspecified.

Pure luck and chance: where knowledge is relevant or irrelevant, search is haphazard, and the explored opportunity is specified.

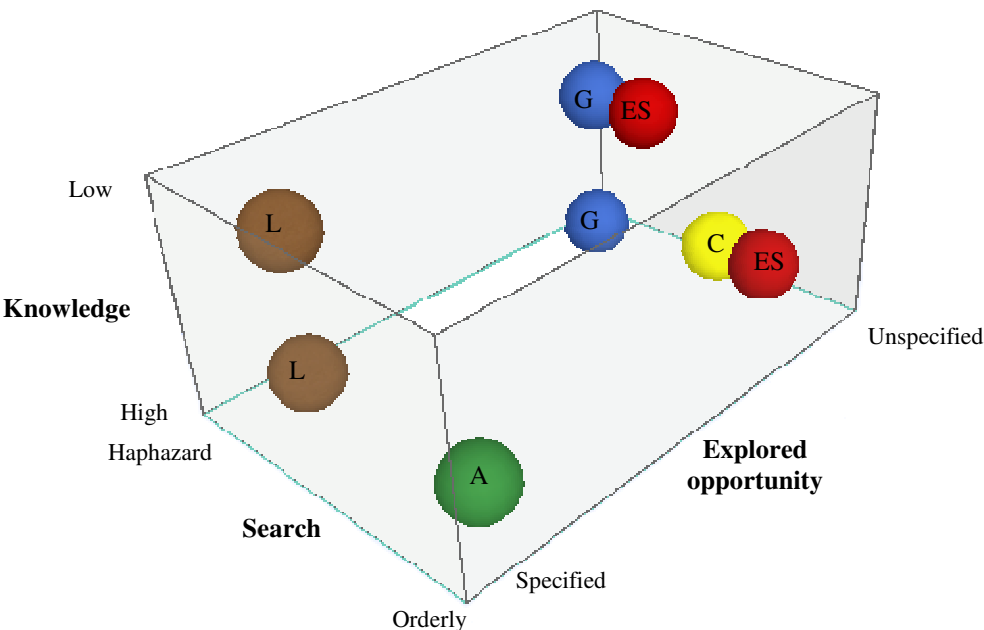


Figure 5.4. Universal serendipity patterns in entrepreneurship

Key:

- G: Galilean serendipity
- C: Columbian serendipity
- A: Archimedean serendipity
- ES: Entrepreneurial Serendipity
- L: Pure luck or chance

Serendipity patterns in the investigated firms are illustrated in Table 5.3. This table shows, which pattern of serendipity occurred in each firm and presents some of the examples of the patterns in both NZ and IR firms.

5.2.2 Serendipity Triggers Growth

Results showed that serendipity brings new opportunities to firms and has an indirect influence on fast growth. The mappings showed that serendipity potentially brings new opportunities to the firm (see Chapter 8) and entrepreneurs discover and exploit these new opportunities using their skills, ability, alertness, and opportunistic point of view. To this end, entrepreneurs tried to keep themselves informed about their market and the changes in it. In terms of the interrelationship between serendipity and growth, we found that serendipity has an indirect rather than a direct influence on fast-growth firms. Serendipity serves as a catalyst or facilitator of growth occurring at the start of the growth process. Thus, serendipity alone does not lead to fast growth but is an antecedent to the pursuit of growth opportunities. There is no direct relationship between serendipity and growth and there are always other mediating variables between them. These findings were also confirmed by running the central concept command in Decision Explorer[®] software (see Chapter 8). Sometimes the causal maps seemed to show a direct link between serendipity and fast growth at first glance, but after further investigation, we found some mediating factors between serendipity and growth: a firm's ability to exploit new opportunities and a firm's ability to implement an effective marketing strategy.

Entrepreneurs reported the belief that serendipity occurs because they do something differently in comparison to their competitors, such as focusing on hard work and perseverance, expansion of personal and business networks, presence in the market, and close relationships to their clients. In so doing, they exposed themselves to serendipity that could potentially bring new opportunities to their firms and likely leads to fast growth.

“I think choosing the right industry and choosing the right field to get involved with is probably pretty important, particularly when you know nothing like I did.”-ALE

“Be sure that everyone has got something, he has done very hard work.”-TBE

“We always monitor our environment and adjust our plan based on that. We constantly adapt ourselves to changes in the environment and use the benefits of those changes. We respond very well to our environment.”-TTM

What we found is that serendipity occurs particularly at the first step of growth process. It is notable that causal maps do not show any direct relationship between serendipity and growth, rather the results demonstrate an indirect link between serendipity and fast growth. Serendipity opens new opportunities to entrepreneurs, and they try to exploit these fresh opportunities that are likely to create fast growth.

One firm did show a direct relationship between serendipity and fast growth in the causal map. However, the entrepreneur of this firm believes that they got the big project that resulted in fast growth because of their previously successful projects and their credibility in the marketplace. Therefore, despite a direct link between the two aforementioned elements in that firm, we may conclude that serendipity does not affect fast growth directly, and it is seen more at the beginning of the pathway to fast growth. This confirms the following proposition:

P_{1b}: Serendipity creates new opportunities that when explored can lead to fast growth.

However, the influence is not direct and there are some mediating factors, namely effectuation and EM. These factors will be discussed in following chapters.

Based on findings, we expand on OC theory (2011). This expansion is an important contribution to the field. In OC theory, optimism and chance are two main factors that encourage

entrepreneurs to continue the business. Optimism helps entrepreneurs to maintain hope that they may gain more and chance is a driver of entrepreneurial behaviour, influencing whether they will continue their efforts. In OC theory, an entrepreneur is likened to a gambler who sits in front of a roulette wheel and desires to invest their money in the game to earn more and more. Our findings showed chance is not the only thing that may lead to a successful firm. The ability to recognise that chance and convert it to a new opportunity is likely to be more important than chance alone, since serendipitous opportunities need to be leveraged by responding well to them and using available resources (Merrilees, et al.,1998). Entrepreneurs often defined themselves as explorers of new opportunities. This suggests that the ability to realise and exploit an opportunity is important in being able to identify a serendipitous opportunity and use it.

“I’m always looking for an opportunity, for an angle, for some different way of doing things.”- ASM

“I feel I’m opportunistic ... means whatever happens I can see it unconsciously...actually I observe everything like this.”-TME

“We were growing steadily, looking for opportunities and bringing people into the business.”-ACL

“It’s a big industry that we’re in, a huge industry. And so there’s always opportunities, it’s just identifying which ones....”-CKE

Therefore, the entrepreneur's opportunistic point of view to realise chance and ability to convert it into a new opportunity has a greater influence on business growth than chance alone. Another important issue here is that many entrepreneurs in this study did not believe in chance or luck. They believed they were in charge of influencing the future of their businesses, but acknowledged they needed luck to be in the right place at the right time. Thus, this illustrates that

there are additional factors beyond mere serendipity that contribute to fast growth. We will discuss these in the following sections.

5.2.3 How Does Serendipity Happen?

We found strong evidence that personal and business networks and close relationships with customers facilitate the occurrence of serendipity. Personal networks, especially in the early stages of establishing a business, are significant sources of serendipity. In addition, along with the development of firms, business networks will grow, and this can be another source of serendipity. For example, 14 of our participants benefited from personal and business networks in the early and late stages of their businesses and during their firms' operation. Table 5.4 shows the sources of serendipity that were identified in the causal maps for each firm. Entrepreneurs signified that serendipity was a consequence of perseverance and hard work and it was because of the belief that they could succeed at something even after experiencing failures.

Table 5.4. Sources of serendipity

NZ	Sources of serendipity	IR	Sources of serendipity
COP	Networks- Luck/chance- coincidence	TRO	Network-Perseverance-Serve to people-High quality products
CPN	His marriage- Networks- Perseverance	TBE	Network-Luck/chance-Serve to people- Trial and error-Environment
CKE	Perseverance –Networks-high quality products	TDI	Luck/chance- opportunistic point of view-
CET	Networks-Credibility-high quality products	THO	Environment- Networks-Customers
CST	Environment- Learning- high quality products	TME	Networks- Championships in some sports- Coincident-Nature of industry
ASM	Environment- Networks- Characteristics- Perseverance-Luck/chance	TTM	Luck/chance- Networks- His students
ALE	Environment- Networks- Learning- Perseverance-Luck/chance	TYA	×
ACL	×	TAL	Networks- Pricing strategy in first two years- Luck/chance- Perseverance
AIY	Network- Study-Characteristics- perseverance	TAR	Networks- Luck/chance-Perseverance
ADK	×	TAZ	Networks-Experience-Perseverance

Table 5.5 shows the most frequent sources of serendipity for each country. The most frequent source in both NZ and IR is networks. Pure luck or chance (with no explanation for it) is the second most frequent source in IR, whereas in NZ it is the fifth. Perseverance is the second most frequent source in NZ, while in IR it is the third most frequent. Therefore, networks, luck or chance, perseverance, environment, and high-quality products are the most frequent sources of serendipity in our participating firms. The role of personal and business networks is very important, and a majority of the observed serendipities in both countries are a result of these.

Table 5.5. Frequency of serendipity sources

NZ	Frequency	IR	Frequency	Total	Frequency
Network	7	Network	8	Network	15
Perseverance	4	Pure luck/chance	5	Pure luck/chance	8
High quality products	3	Perseverance	4	Perseverance	8
Environment	3	Serve to people	2	Environment	5
Pure luck/chance	3	Environment	2	High quality products	4
Characteristics	2	Other	10	Characteristics	2
Learning	2			Learning	2
Other	5			Serve to people	2
				Coincidence	2
				Other	12
Total	29	Total	31	Total	60

“We had a very big project with the city council ... we got it like this: My wife told her friend about my job, and she then told her husband. One day her husband called me saying his company needed metal testing and I said we can do it for you. He showed the results of the test to the city council and the council wanted to work with me, and that became a big project for us”-TME

“It is fair to say that [we got] a lot of our clients [through] a combination of networking, referrals or cold-calling.”-COP

“You build networks from the time of your apprenticeship [in this field]. If you work hard earnestly in your workplace and take full responsibility for your work, gradually people will trust in you – all businessmen, brokers and dealers – and it will be a great support to you in the future.”-TRO

5.2.4 Serendipity: Exogenous or Endogenous?

Serendipity can be exogenous or endogenous. Ma (2002) conceptualised the role of luck in gaining competitive advantage, classifying serendipitous events into two different categories related to internal and external firm activities. Another recent study concludes that firms could expose themselves to the market by leveraging their networks to get more serendipitous opportunities (Ong & Ismail, 2012). In this research, we also looked for exogenous and endogenous sources of serendipity at the firm level. As shown in Table 5.6, some sources are exogenous, such as environment and changes in the marketplace. For instance, a global recession or natural disaster, such as an earthquake that causes damage to the local economy, created opportunities for some companies. For example, ALE started growing during the economic crisis when its partner became bankrupt, and CPN used the devastating Christchurch earthquake to boost their relationship with their customers.

Table 5.6. Exogenous and endogenous source of serendipity

NZ	Exo or Endo	IR	Exo or Endo
Network	Exo	Network	Exo
Perseverance	Endo	Luck/chance	Exo
High quality products	Endo	Perseverance	Endo
Environment	Exo	Serve to people	Endo
Luck/chance	Exo	Environment	Exo
Characteristics	Endo		
Learning	Exo and Endo		

Key: Exo: Exogenous, Endo: Endogenous

“But then the recession hit, ABC went into receivership, our major investor lost everything in subprime mortgages and we were left with massive development obligations, no money and a whole lot of childcare centres that we knew how to run but we didn’t take that seriously. So that’s what happened in, well, 2007 to 2009, that period. So we had to stop building, find some money and learn how to make money out of these businesses.”-ALE

“I mean, you could say that the earthquake was very lucky for us, but we used the earthquake as an opportunity to grow – so a lot of our competitors let go of staff, downsized because of uncertainty, we snapped those people up straight away and then worried about finding the work afterwards, and then we won the X contract, so we do all the earthquake recovery work.”-CPN

Results showed that environment, as an exogenous element, could bring new opportunities to a firm through the government enactment of new regulations, rules or agreements. CST benefited from a trade agreement between New Zealand and China and increased their exports, leveraging the new tariff break regulations.

“And so as we were turning on our infant formula plant, after a three-year period, probably, of planning, raising the capital and then building the plant, New Zealand entered into a free trade agreement that allowed us to export infant formula products into China at no tariff. Only country in the world who could do it, and we were the only company in New Zealand who had positioned themselves to take maximum advantage of that.”-CST

Entrepreneurs interpreted the environment as a great element, which to some extent could bring new opportunities to the company but there is a crucial point here: the reaction to the

environment. This is an ability to cope with turbulence. We found evidence that this ability is likely a main challenge of entrepreneurs. They think that luck or chance is under their control despite its uncontrollability if they have the power of utilising good and bad incidents. Thus, environment per se is an exogenous element that has a great influence on entrepreneurial firms by creating new opportunities through its threats and difficulties.

“I always believed that opportunities and threats were equal, I mean if threats are high now in Iran’s market, the truth is that opportunities are going higher at that rate. I think a professional driver takes over his rivals in road turns when others turn slowly.”-TTM

“It was that inside our business, we had these processes going that were learning very quickly from what was happening, and responding to that very, very quickly, and preparing ourselves, and those same drivers that we were responding to, were actually causing in government, the two governments to talk to each other and set up a free trade agreement”-CST

“Opportunities emerge around you, if you are prepared you use those opportunities. If you’re not, you can’t use them. What does preparation mean? It means you should be ready in every part of business, in our work that uses laboratory facilities, I’d say these are software, hardware and mindware (mental ability).”-TME

Networks are very significant, and as we illustrated earlier, are vital in doing business. It is difficult to separate personal and business networks because most of the time they are intertwined. Creating and expanding networks is one of the main activities of entrepreneurs conducting business. Developing public relationships, attending networking programs, setting up professional groups helped entrepreneurs to be in touch with players in the market. Another function of networks is to assist an entrepreneur with obtaining essential information from the

market. For example, the founder of TAL said that he tries to expand his relationship with his competitors in order to become informed about what happens in the market. This is beyond his formal monitoring of his company's competitors.

“But I’m probably, you know, as far as dealing with the people that make this company grow I think I do that reasonably well. So I’m not too tough, I’m not too easy going, I try and be good to people and I’ve been lucky. I’m slowly getting better and better people around me”-ALE

“Well, one thing that I did from a very early point on, is every time I had a contact that I made... I would save their name and number in my phone straightaway, it didn’t matter how small or big they were and the practice of that meant that when they called I knew their name, ... so now I’ve got over 2,000 contacts in my phone that each I know by name... and yeah, I suppose that’s just one small thing that helps in networking.”-ADK

5.2.5 Serendipity in the Firm’s Life Cycle

Dodge and Robbins (1992) suggest a life-cycle model for small businesses consisting of four stages: formation, early growth, later growth, and stability. Formation is the stage where entrepreneurs want to establish a business or pursue a new idea. Early growth comes after formation and is when the growth of the firm tends to increase. In the later growth stage, the rate of growth decreases. At the fourth stage, stability, the business has been established and operates in a stable manner, competing with its rivals. The authors argue that during the formation and early growth stages, the role of exogenous issues like environment is highlighted, while internal or endogenous issues are more important during the stability stage, especially in making decisions for the future of the firm to avoid failure.

Our findings suggest that serendipity can happen at any of these four stages of the business life cycle. Of the 17 firms that reported significant occurrences of serendipities, 16 confronted serendipities at the formation and early growth stages, in terms of finding new ideas or new markets etc., while one encountered serendipity in later stages. Convincing evidence to show the exact stages where significant serendipities occurred in this firm could not be found; therefore, we were not able to put it in a category. Nevertheless, it is worth noting that based on the findings discussed earlier, unspecified opportunities appear to be common in everyday businesses, suggesting serendipity may happen at any stage of the firm life cycle. Table 5.7 illustrates the *significant* serendipities found in firms' life cycles.

Table 5.7. Serendipity in firms' life cycles

NZ	Serendipity during life cycle	IR	Serendipity during life cycle
COP	Formation	TRO	Formation, during life cycle
CPN	Formation, during life cycle	TBE	Early growth
CKE	Early growth	TDI	Formation
CET	Formation	THO	Formation and early growth
CST	During life cycle	TME	Formation
ASM	Early growth	TTM	Formation
ALE	Early growth	TYA	×
ACL	×	TAL	Formation
AIY	Early growth	TAR	Formation
ADK	×	TAZ	Formation

Examples of serendipities occurring in the formation stage can be found in TTM, CET, and TDI. The founder of TTM was invited to join his current business because of his college reputation and his achievement in sport. Two years later he bought the business, which was in debt. After he paid off the debt, the business started to grow. The founding entrepreneur of CET met a friend who was looking for a new job, and they decided to establish their own business.

TDI's entrepreneur found his first idea of running an online business (online review and shopping) when he was searching for a brand new camera and encountered a website that reviewed digital cameras in a foreign language. This was an Entrepreneurial Serendipity that encouraged him to run a similar business in Iran. It is interesting that he started with the same concept to review digital cameras, and then he expanded his business.

These findings lead us to confirm that most significant serendipities occur at the beginning or early stage of a firm's life cycle. These serendipities are of such importance that we may regard them as triggers for fast growth. For instance, in some companies, the first or second project was very important in starting a successful career and boosting the credibility of the firm to get the big one, and these firms founded their first or second project serendipitously. Then they went through a growth cycle. For example, TAR, TTM, TAL, and COP explored their first project serendipitously and this started their pathway to growth.

5.2.6 Serendipity and Resource Endowment

Serendipity appears to occur in different patterns between two types of businesses, depending on the available resources of a founder. The first type – those with no or fewer resources in hand before launching the current business – experienced serendipity more than the second type. The second type – those with founders that had more resources – tended to be more oriented towards planning and strategy, perhaps due to their background, in the way they exploited their opportunities and resources (such as enough money to start a business). Cluster analysis demonstrated that the first group faced serendipity more than the second group, especially in the first stage of the business life cycle. We will discuss this more in the next chapter.

5.3 Entrepreneurs' Attitudes towards Serendipity

The majority of entrepreneurs believed that they needed luck in business. They also believed that they created their own luck. They did not believe in pure luck, which they defined as something happening without them having any part in it or influence on it – in other words, gaining without doing anything. Instead, they all believed in being responsible for attracting their own luck and doing their best to achieve their goals. They did not like to sit and wait for something to happen to them.

“Well, I believe you make your own luck...people don’t just get lucky, unless you find a winning lotto ticket, you know.” -ASM

“To me, luck is suddenly finding a treasure, I don’t believe in that sort of luck.” -TBE

“Yeah, I agree you make your own luck, but I think you also do need things to go your way a little bit, you know, there’s fate there too somewhere.” - ALE

“There is no luck... luck to me is sitting here and something [valuable] falls from the sky.” -TRO

It is important to note that all entrepreneurs saw serendipity as a business fact and do not think it is possible to do business without it. They all believed they needed to be fortunate to be successful. This similar thinking helps us to see how entrepreneurs consider serendipity and luck or chance to be different. When we interviewed the participants, we first asked entrepreneurs about their views on luck. After the interviews, we gave a brief explanation of serendipity to the interviewees and asked them to compare it to the definition to luck or chance. Initially, many of them did not have a clear idea about serendipity, but after further discussion, all agreed on the

existence of serendipity in their businesses and were able to differentiate luck from serendipity. Participants interpreted luck as something beyond their control, but considered serendipity as something that influenced their business through their own efforts. In other words, luck, or chance are things beyond their control, but can trigger their enthusiasm towards business or personal goals.

“Everything is serendipity, there is no business without serendipity.”-TME

“You need to be lucky, you know, you need to be lucky – people say you can make your own luck there, so we do work very hard to create an environment where you can be lucky, but when you get selected to provide some IT services in a very competitive market, particularly where the large companies, which is our target, already have agreements with other suppliers, you need a lot of good luck to come your way.”-ACL

“You still do need an element of fortune, you know, on top of all of that.”-ALE

“Luck is combination of opportunity and your preparation.” -TME

Furthermore, their endeavours are focused on responding to whatever occurs to them in their businesses. They believe that in order to explore opportunities, they have a responsibility to respond quickly to every good and bad event. This is the competitive advantage in their business, compared to other rivals in the market. Thus, entrepreneurs convert unexpected events into new opportunities by working hard and utilizing their skills and power in the market.

“I believe you make your own luck, to a degree. I don’t, I wouldn’t, I don’t think, nothing beats hard work, from my standpoint.”-CPN

“You’re a product of your environment, okay, and then you choose how to react. ... Do you go down the bad path or do you change et cetera, or do you move on and things like

that. So all of those things, probably those decision gates along the way, eventually you're going to get some good luck along the way, but you know, part of that is probably your own doing, because if you hadn't made that decision you wouldn't have been there, so that may be where the serendipity comes into it.”-COP

“Make your own luck. Great saying from, I think it was Jack Nicholas, the golfer. Was it? It was one of the great golfers anyway said, the more I practice the luckier I become. I do not believe in luck.”-CKE

“I believe in chance but I don't wait for that.... I believe no pain, no gain.” -TBE

5.3.1 Cultural Differences

Culturally, there is a difference between how New Zealand and Iranian entrepreneurs view serendipity. New Zealanders relate serendipity to their own hard work, perseverance, networks, and so on (as discussed earlier) but some Iranian entrepreneurs (as Muslims) relate serendipity to “divine will.” They believe that their faith leads them to behave in “the right way” and guides their intent to serve people better (especially their customers), and this leads them to face serendipity. Some Iranian entrepreneurs believe that there is a divine power beyond their control that monitors their activities and guides them. They believe that what is happening to them is a result of their perseverance and hard work, but this is linked to that divine will. For them, failure in some areas means that the divine will does not support their intention, so being successful will not bring good fortune to them. They accept this, believing it is fate, and try to change to make things consistent with divine will. Furthermore, two of the Iranian entrepreneurs believed that if they did their best to serve people very well, God would help them to achieve their goals if they were in line with his will. Many of these beliefs stem from moral codes

associated with religious beliefs or Islamic codes, such as being committed to Halal revenue and serving people or country.

“If you want to meet your goal you should be honest with people...if you are intend to serve people very well, God, nature and people will help you.”-TRO

“Now, we reached from 3 people to 25. I’d say this is a favour from God.”-TYA

“The second issue is the attitudes people have towards their jobs – their enthusiasm and their goals– if the goal is monotheistic,...and they[entrepreneurs] believe in their goals, serendipity will happen based on this attitude.”-TAR

Despite differences in spiritual beliefs and moral codes, many similarities were observed in the views of Iranian and New Zealand entrepreneurs. For example, they shared similar views on the existence of serendipity, the value of perseverance, and the use of strategic marketing to exploit discovered opportunities. This is in line with the notion that Islamic entrepreneurs are not different from other entrepreneurs in terms of developing their businesses to gain more profit, however Islamic entrepreneurs believe that success or failure is an endowment from Allah (Adas, 2006).

Islamic entrepreneurs also sanctify hard work, economic success and pursuit of wealth as important religious obligations of Muslims According to commonly accepted Islamic theology, both wealth and poverty are God’s will (takdir-ilahi), i.e., the consequence of divine will (kader), or destiny.... Islamic entrepreneurs often told me that kader should not be interpreted as if God determines your fate in this world once and for all. Allah has also given free will to people through which they should work hard and thrive in this world. Allah will not change one’s lot and conditions unless individuals themselves strive to change their own conditions. (Adas, 2006, pp. 129, 130)

Furthermore, in the Muslim holy book, the Quran, there is a verse, which says:

And whosoever keeps his duty to Allah, Allah will appoint a way out for him, and will provide for him from whence he has no expectation. (Chapter 65-Verse 2 &3)

5.4 Summary and Conclusions

Overall, serendipity does play a role in nearly every investigated business, irrespective of their size and age. Serendipity potentially leads to new opportunities and entrepreneurs can exploit them to achieve fast growth. There is an indirect link between serendipity and fast growth, and serendipitous opportunities need to be exploited properly to meet the firm's goal. Moreover, our findings extend OC theory (Storey, 2011) and suggests that optimism and chance are not the only factors that lead to a successful firm. The ability to recognise and assess a chance event and convert it into a new opportunity is likely to be more important than optimism and chance alone.

Through investigating fast-growth firms in New Zealand and Iran, we identified a new pattern of serendipity that has not been identified before in terms of opportunity discovery. This unique pattern, Entrepreneurial Serendipity, is characterised by finding an unspecified opportunity through orderly or haphazard search, with either high or low levels of knowledge. This pattern occurs when an entrepreneur looks for any opportunity or idea to start a business, but without any specified opportunities in mind. Previous knowledge and experience may be used to enter a similar field, or a business may be started without prior knowledge. This pattern is observed in many fast-growth firms, especially at the initial stages of firm development when entrepreneurs are looking to find any type of opportunity to be self-employed and explore an interesting one serendipitously.

Obtaining new ideas through serendipity at the initial stage of a firm's life cycle is common in firms with scarce resources for starting business. Networks, pure luck or chance, perseverance, and high quality of products proved to be important sources of serendipity in the

cases that were investigated. The overall results showed that networks are a main source of serendipity. Expanding personal and business networks are essential to bringing more serendipity to the firm. This finding supports the result of previous studies on internationalisation of firms that networks can open up new serendipitous opportunities for companies (Merrilees et al., 1998; Meyer & Skak, 2002; Vasilchenko & Morrish, 2011). Pure luck and chance, such as being in the right place at the right time, plays a role in the growth of firms, but entrepreneurs maintain that they create their own luck, and their hard work leads them to be in the right place when the time comes.

Despite many similarities between the two countries, we noticed some differences between the two countries regarding the cultural and religious viewpoints of entrepreneurs. In Iran, some believed that serendipity descends from God with respect to their plans and hard work. They believe in serving people as a main goal and this would lead to God's gratification, which would in turn would bring them new opportunities they do not necessarily expect.

Taken as a whole, serendipity is an element that is difficult to ignore in doing business, along with networks, entrepreneurial perseverance, and quality products. This confirms our first and second proposition that serendipity leads to new opportunities, and when these are exploited properly, leads to fast growth. Findings also indicate that serendipity does not directly influence the growth of firms, but rather, other mediating elements stand between serendipity and growth. The way opportunities are exploited determines how firms can grow fast. We will discuss these findings in the next two chapters.

Chapter Six: Exploitation Phase. Section One

An Effectuation Approach to Fast Growth

6.1 Introduction

Serendipity does not influence fast growth directly, and is a precursor for such growth. However, the role of serendipity in firm growth cannot be ignored. Cluster analysis showed that effectuation and entrepreneurial marketing were two main constructs that directly and indirectly influenced growth. This chapter discusses the role of effectuation logic in the participating firms. It provides results from investigating the second construct of the study in light of the elements of effectuation from Sarasvathy's (2001) conceptual model. It explains how entrepreneurs use effectuation reasoning to exploit opportunities and develop their businesses to achieve their goals. This chapter also investigates the application of effectuation logic in the participating firms and the interrelationships of three available means and four principles in each firm with fast growth.

6.2 Main Findings

Cluster and central concept analyses showed that most entrepreneurs in fast-growth firms used effectuation logic in their decision-making, especially when they started their firms (see sections 8.3). Effectuation is a type of decision-making reasoning where entrepreneurs consider the resources they possess and then make decisions about possible courses of action or goals based on these resources. They make decisions about goals based on available means instead of having pre-set goals and resources determine their decision-making logic. Of the firms investigated, 90% started their businesses with limited resources in an effectuate manner, but

over time, they started shifting to causation, using more goal-setting, planning, and strategy. Overall, effectuation elements were largely observed in participating firms; however, the evidence was diverse in a few firms. Entrepreneurs came from different family backgrounds, but they shared similar characteristics, such as innovation, perseverance, opportunism, creating and being involved in networks, as well as having a vision. Most of them had relevant knowledge and experience about their business. They had partners who shared the risk of the business. Networking was a key element in searching for more opportunities. Entrepreneurs were cautious about taking risks and had different strategies to control the unknown future, such as geographical diversification and creating a portfolio of products and services.

Effectuation was widely observed in investigated fast-growth firms. Causal maps showed that elements of effectuation used in exploring and exploiting new opportunities influenced fast growth. In the following section, we will discuss the elements of effectuation in detail.

6.3 Principles of Effectuation

6.3.1 Entrepreneurs' Available Means

6.3.1.1 Who I am

This first set of available means refers to the backgrounds and characteristics of entrepreneurs. It determines the extent to which entrepreneurs are able to run a business at an individual level based on their traits and background. In this study, we explored the family backgrounds and characteristics of the entrepreneurs.

- **Family Background**

It has been shown that family background has an influence on becoming an entrepreneur in the future (Morrish, 2008). Some respondents in this study did not like to talk about their

families, whereas others spoke about their families at length, revealing a very diverse range of family backgrounds. Table 6.1 illustrates the general family backgrounds of the entrepreneurs in both countries. It is very difficult to reach a definitive conclusion about the impact of family background on growth, but as can be seen in some cases, working hard, being an entrepreneur, or being self-employed were common values in these families.

“Working hard is institutionalised in the culture of our family. It is the pride of every man in our family.”-TTM

“I was forced to leave school at 16 by my father who wanted me to go and do a trade.”-CPN

“We are the third generation in this business, my father and grandfather were in this business.”-TYA

Table 6.1. Family background of participating entrepreneurs

NZ	General family background	IR	General family background
COP	Father was self employed Dad wanted him to do trading	TRO	×
CPN	Rural background Dad wanted him to do trading	TBE	Traditional and populous family Tending to family business
CKE	×	TDI	A normal mid-class family
CET	Father was self employed Mother was self employed	THO	Parents both employees Mid-class family
CST	Small and mid-class family	TME	Parents both employees Upper mid-class family
ASM	A happy family	TTM	Urban background Under mid-class family Working culture
ALE	×	TYA	Father was entrepreneur Tending to family business Upper class family
ACL	Parents ran a shop (self-employed) Got familiar with buying and selling	TAL	Mid-class family Business culture in the past
AIY	Lower class family Solo parent	TAR	Father is self employed Mid class family
ADK	×	TAZ	Under mid-class family

While an individual's family background could affect their tendency to become an entrepreneur, the diversity of family backgrounds in this research does not give a clear indication of the influence of family on entrepreneurs. In one case, the entrepreneur wanted to change his family status by working hard and becoming rich to have a better future.

"I came from a family, a solo parent, very limited means and so as a youngster, you know, we probably didn't have some of the things that basically a good middle class family should have. So as a youngster I was very obsessed with when I was an adult that I wouldn't be in a situation where I couldn't give my kids anything that they needed to have to be able to have a full life."-ACL

In another case, parents were against the entrepreneur's wishes to run a business and asked him to be an employee rather than take the risk.

"My parents are both employees and strongly disagreed with me running my own business. It has been about one year since I've gotten rid of their three-years of pressure on me to be an employee."-TYA

In two Iranian cases, those of TYA and TBE, the entrepreneurs belonged to families with many children and a history of family business. In such an environment, the males of the family got together to launch their own business. In other cases, like those of TRO, TDI, TAL, TAR, and CPN, there was no history of family business, but the entrepreneurs had established family businesses with their siblings, spouses, or close relatives. Of the Iranian firms, 60% were family businesses, compared to only 10% of New Zealand firms. This difference is interesting. It appears that Iranian firms are more likely to start a business with family to reduce risk, since the Iranian environment can be unstable, whereas New Zealand's tends to be more stable.

- **Characteristics**

In some cases, the characteristics of entrepreneurs influenced their success. The causal maps showed that there was a direct influence on success in some cases, but in most cases this influence was indirect. Clusters showed that entrepreneurs' characteristics facilitated exploring and exploiting new opportunities that may lead to fast growth. For example, characteristics, such as the ability to create and be involved in networks bring new opportunities to the firm, with the potential consequence of a great contract or project leading to fast growth. It can be concluded that characteristics influence growth in an indirect manner by facilitating exploration of opportunities.

Table 6.2 summarises significant characteristics of entrepreneurs based on the classic categories of characteristics in entrepreneurship (Schollhammer & Kuriloff, 1979). Among these characteristics, perseverance, opportunism, innovation, vision, and the ability to create networks are the most important traits of entrepreneurs.

Table 6.2. Significant characteristics of entrepreneurs in causal maps

NZ	Significant characteristics	IR	Significant characteristics
COP	Perseverance, opportunism	TRO	Perseverance, vision, patience, responsibility, leadership
CPN	Creating networks, opportunism perseverance	TBE	Vision, perseverance
CKE	Passion, perseverance	TDI	Innovation, patience, vision, opportunism
CET	Vision, opportunism	THO	Creating networks, vision, opportunism
CST	Ambition, discipline, learning	TME	Perseverance, innovation
ASM	Determinant, Energy, positive thinking, vision, intuition, leadership skill, creativity	TTM	Perseverance, creating networks, learning, opportunism
ALE	Vision, perseverance, opportunism	TYA	Vision, perseverance
ACL	Perseverance, opportunism, ambition	TAL	Creating networks, perseverance, vision, innovation
AIY	Passion, vision, positive thinking	TAR	Creating networks, perseverance
ADK	Perseverance, creating networks	TAZ	Innovation, responsibility, opportunism

- **Money Is Not Necessarily the Goal**

Recent research has found a variety of reasons why entrepreneurs are driven to start and run their own businesses, such as being bored with a previous job, wanting to be their own boss, and wanting to make more money (Lam & Harker, 2013). While making more money is a desired reason for wanting to run a business, we found other reasons relating to entrepreneurs' aspirations. Five entrepreneurs had other expectations from their businesses; making money was not the main one. Higher order aspirations such as serving people and country and creating jobs were more important goals for three Iranian entrepreneurs. These participants exhibited patriotism and passion in improving the economy of their country.

“I do my job with so much love, not for money, ... if you wish good things for people, God, people and nature will help you and money will come to you ... do you know what is a way of gaining money? Do not look for money. If you look for money, it will escape.”-TRO

“One of my goals is to create a company and create, for example, 200 jobs.”-TAR

“In a nutshell, whoever is doing business just for money, they wouldn't serve to their people and their country and would be a harmful person. Anyone who enters the business with love of their homeland, humans, and society will grow and will play a role for their nation.”-TAZ

One New Zealand entrepreneur (ACL) wanted to be different in the market and apply technology unlike others. Another from ADK needed money to realise his dreams to promote his religious beliefs and make people closer to God.

“Yeah, so when I started I really wanted to have more of a reason and I didn't want to just make money for me and that was not really what I was after, as that would be sort of

a self-centred goal. What I was wanting to do is provide a – facilitate a big place for people to come and chill out and with my Christian sort of beliefs I was hoping to make that place a place where people chill out and get to know God.”- ADK

“It’s not really about the money. The money is secondary to the ability to build a company that can make a difference at using technology, but on a large scale. So we’re not driven by the money, there’s other ways – our business would be different if we were only interested in revenue and only interested in profit, but we are actually interested in making a difference using technology. So it’s a slightly different aspiration, but that’s a very human trait and that’s what drives the vision of the company. So I think it’s 100 percent.”- ACL

There is evidence from other interviews that entrepreneurs want to be valuable members of society and a part of an economy’s progress. For example, TBE, TDI, TTM, and TME’s entrepreneurs have set high goals to serve their country and increase the quality of the market they are operating in. We were not able to break down and divide the goals of entrepreneurs into different and distinct categories, so it is very difficult to judge the main motivation for running a business.

6.3.1.2 What I know?

Most of the entrepreneurs in this study had education or previous experience related to the field they were working in. In 11 of 20 cases, education was related to what entrepreneurs did in their current businesses. Entrepreneurs in 9 of 20 cases had businesses in fields that were completely different from their education. They did not have any formal education to run their current business. Less than 50% of entrepreneurs were working in a field without any previous academic or formal education and knowledge. Of the 20 entrepreneurs, 14 had previous

experience in their field and 17 had either previous experience or formal education. Only three of the entrepreneurs had neither formal education nor previous experience related to their field. Further investigation showed that the partners of these three entrepreneurs had sufficient background in what they were doing. For instance, TBE's partner had been working in the field for about 20 years and TAL's partner was experienced in making industrial moulds to start the firm's initial activities.

Table 6.3 illustrates the entrepreneurs' related education and experience. Relevant education or experience appears to impact the decision about the type of business launched. In some cases where entrepreneurs did not have either relevant education or experience, their partners did.

Table 6.3. Entrepreneurs' related education and experience

NZ	Relevant Education	Relevant experience	IR	Relevant Education	Relevant experience
COP	√	√	TRO	×	√
CPN	×	×	TBE	×	×
CKE	×	√	TDI	√	×
CET	×	√	THO	√	√
CST	√	√	TME	√	×
ASM	√	√	TTM	√	√
ALE	√	×	TYA	√	√
ACL	√	√	TAL	×	×
AIY	×	√	TAR	√	√
ADK	×	√	TAZ	×	√

6.3.1.3 Whom I know

The role of networks in fast-growth firms is discussed in depth in the next chapter. Networks are the most significant factors in fast growth among our investigated firms. Both

personal and business networks are very crucial for entrepreneurs. Most of the entrepreneurs leverage networks to get more opportunities or exploit opportunities very well. Most of them, especially at the early stage of the firms' life cycles, used their networks to access new opportunities or gain more benefits in relation to the firms' interests.

6.3.2 Affordable Loss and Risk Taking

Similar to past studies (Morrish, 2008), the findings showed that these two factors were related and whenever our participants were asked about affordable loss or risk-taking, they replied by combining these two factors. In fact, for many of them, risk-taking and affordable loss were equal to each other, and their first priority was to look at how much they could lose. Along with this, the research found that attitudes towards risk-taking and affordable loss differed in Iran and New Zealand. Entrepreneurs in Iran were more concerned about the amount of money they could lose rather than the risk itself. In a number of Iranian cases, affordable loss was strongly tied to personal assets, and entrepreneurs took risks only to the extent that they could pay their share in a partnership with their personal assets such as property. Iran's turbulent economy would be a reason for this as they avoided very big risks so they could have the ability to start again.

“In risk-taking, the most important aspect is the financial side, I take a risk to extend I can pay my share. Imagine I take a risk and I lose, I should be able to compensate for my share of the loss. I may have to sell my car or my house and rent a home, or spend all my savings, but I can take the risk as long as I am not going to prison.”-TAR

“I am not afraid of taking risks. How did I do that? My risk-taking was not baseless in terms of finances. I had a policy for taking risks. Whenever I wanted to engage in a risk, I went to the agent and asked for the value of my house. For example, at that time they said

it's about 300-400 [60-80 thousand US dollars] million rials. I thought to myself, I may lose 300 million and I can buy a house with 100 million in the town of Andishe ... as the number went up I could take bigger risks.... I always asked for the value of my house to take risks. The agent said 600, I took a risk valued at 400.”-TAZ

“We didn’t take risks that could knock us down completely. Some people say, ‘that’s ok if I fall.’ No, if the risk is too great you can’t get up any more.”-TBE

In New Zealand, entrepreneurs are more cautious about managing risks than the financial aspects. The financial side is important to them, especially the money they would make from taking a risk, but unlike Iranian entrepreneurs, their main focus is to calculate and mitigate the risk, before facing it, and to manage that risk as long as they can.

“I mean, there’s always risks you can’t control, and bits of the market which are going to change, which you have no control over, but if you’re going to take on a new venture, you, we tend to control our risk really well by understanding what we’re doing before we do it. So we have a very high degree of confidence when we invest or do something new.”-CET

“But, when you’re looking at running a business it is always about managing the different aspects of risk.”- ACL

“Oh, we’ve discussed this too. They say that entrepreneurs aren’t risk-takers, they’re actually calculated, very calculated gamblers.”- ALE

“Well, I take into consideration how much am I going to lose if this falls over and I go, well, okay, this is going to take me way too much time and the chances of it succeeding are really low.”- ADK

In conclusion, affordable loss and taking-risk are considered together. More concerns in regard to affordable loss were observed in Iranian firms. Recovering after any failure is crucial for Iranians, so they avoid taking risks without financial support. In contrast, calculating the risk and managing it to avoid failure altogether is the main focus among New Zealand entrepreneurs. This shows that entrepreneurs are not blind risk-takers. It appears that they do not enter a business without due consideration to risk implications.

“But one of our base rules is we don’t go into businesses we know nothing about.” - CET

6.3.3 Partnership

Entrepreneurs reinforce mutual ties with their stakeholders to mitigate the risk of a business and overcome barriers to entry (Sarasvathy, 2001). The results showed that most of the participating entrepreneurs in this study had partners. As indicated in Table 6.4, 65% (13/20) of the investigated entrepreneurs had partners or owned a family business (Casillas et al., 2010; Dyer, 2003), while 35% (7/20) were operating solo and owned an individual company. There was a significant difference between the two countries. In Iran, the percentage of family businesses, which in some of these, entrepreneurs’ family members were partners, was very high at 60% (6/10), in comparison to a mere 10% in New Zealand (1/10). The main reason for this, as was discussed earlier, is that there is higher risk in conducting a business in Iran (World Bank, 2013) than in New Zealand and finding a partner who is interested in joining the business is difficult, so entrepreneurs call for family members to find stakeholders. Family members are more reliable in a very risky situation. Nevertheless, the rate of solo entrepreneurs is similar in both countries.

Table 6.4. Partnership in New Zealand and Iran

NZ	Partner⁴	Family Business	IR	Partner	Family Business
COP	Yes	No	TRO	No	Yes
CPN	No	Yes	TBE	Yes	Yes
CKE	Yes	No	TDI	No	Yes
CET	Yes	No	THO	No	No
CST	Yes	No	TME	No	No
ASM	No	No	TTM	No	No
ALE	Yes	No	TYA	No	Yes
ACL	Yes	No	TAL	No	Yes
AIY	No	No	TAR	No	Yes
ADK	No	No	TAZ	No	No

It can be concluded on the basis of these results that partnership is a common way to mitigate risk in both countries, especially in terms of being able to share the risk with a partner. The number of solo entrepreneurs was the same in both countries, but the percentage of family businesses was higher in Iran than New Zealand. This is likely to be due to Iran's business environment.

“He [the business partner] has particular strengths in one area and I have particular strengths in the other, and between the two of us, we don't seem to go wrong. So that's another part of reducing our risk. I think if either of us had done this on our own, neither of us would have been very successful.” - CET

6.3.4 Control of the Future and Leveraging Contingencies

The third principle of effectuation is controlling unpredictable future events as much as possible, instead of trying to predict future events that are unpredictable. Investigating the ways

⁴ Partner here means a partner who is not a family member.

entrepreneurs in fast-growth firms went about controlling unpredictable future events showed that entrepreneurs had varying responses about how they dealt with the unpredictable future. Table 6.5 shows the most common strategies entrepreneurs used to control their firms' futures that were identified in the causal maps.

Table 6.5. Strategies to control the future

Strategy to control the future	Frequency on the map
Product/services diversification (portfolio creation)	11
Focus on vision	7
Geographical diversification	5
Unrelated diversification	3
Respond to environment	2
Market intelligence	1
Reinforcing purchasing power	1

In terms of diversifying products and services, creating portfolios was a common way of controlling the future among fast-growth firms. Half of the entrepreneurs were very concerned about their product and service portfolio and were not willing to put “all their eggs in one basket,” so they diversified what they offered to their customers.

“If you look at it from that risk management side and everything else, well, we haven’t got all the eggs in one basket.”-COP

“Our competitors think traditionally...but they don’t think if one day there is no red meat what they are going to do? We thought about this since we started, we didn’t put our eggs in the same basket.”-TYA

Geographical diversification was another strategy to avoid negative consequences of unpredictable future events. This strategy was applied in firms with the ability to expand their

market, especially to export markets. Entrepreneurs said that this strategy mitigated the risk of losing markets because of reasons like economic crisis.

Entering a new industry, or unrelated diversification, was another strategy used to mitigate risk. Two New Zealand firms and one Iranian firm had launched another business completely different from their current company. The new businesses were controlled separately; and entrepreneurs maintained that if the existing business failed, they were able to continue doing business with the other one.

“In general, my idea was to start a new business and finally we established a construction company.... In the confectionary industry, we are very dependent on our raw materials and if we can’t find good materials we can’t do anything.... I try to have another business with low investment and high profit.” -TBE

“Well, I think you try and reduce your exposure to too much of the same thing so that’s one way you can mitigate risk. And in my business it’s probably having childcare centres in different locations for a start and then running – the other way, you can run different businesses in different industries. In our case ... we’ve opened a little café downstairs.” - ALE

In other cases, entrepreneurs disagreed on using unrelated diversification as a strategy, holding the idea of focusing on what they are already doing as the best strategy. They felt focusing on the main vision of the business and using all available means at hand was probably best for them. Rather than diversifying, they preferred to be innovative and respond well to their strategic business environment.

“I meet people like that. I’m personally not like that. Personally, I like the idea of doing what you do very well and being the best at what you do. I meet some business owners who own a night club and a magazine and a clothing brand, you know what I mean, and they’re...and it’s like I don’t know how they keep focused because there’s too many diverse interests. But if you have all of your eggs in one basket you have to be constantly innovating, very important to be innovating and staying and ahead of the curve.” - ASM

Others put effort into reacting to the environment affecting the company. In these cases, entrepreneurs have a long-term vision but prefer to stay in their current business, responding according to what comes out of the turbulent market. For instance, TDI, a firm operating in the IT field, is highly innovative and good at reacting to the environment in order to gain maximum benefit from it.

Market intelligence was the predominant strategy in one case. The owner of this company believed that he should be very careful about technological changes in the market. This intelligence came from being around the market, travelling a lot and strengthening relationships with suppliers. This increased awareness of what was going on in the market, enabling the firm to take appropriate actions and strategise about the future.

“We travel a lot. We go, we go, we always foster strong relationships with our overseas suppliers who are in different markets and know different things than we do. In Europe and the USA, the UK, Canada, these people are all in different markets in different stages of the market, in different stages of the market development, you know, part of what happens in Europe doesn’t happen in New Zealand in one market, but in another market it’s what happens in the US.” -CET

The overall preferred method of coping with an unpredictable future was to diversify products and services, because entrepreneurs thought that at any given time, one or more of their product portfolios was likely to be more profitable. Geographical diversification was another method of diversifying products, enabling firms to profit from more markets. Alongside product and service expansion, unrelated diversification, or starting a new business in another field, was another way of mitigating future risk. In this method, entrepreneurs ran more than one business to support their current business in case the primary business failed. An overwhelming 80% (16/20) of fast-growth firms used diversification to increase their competitiveness. These firms used either product and service diversification, geographical diversification, or unrelated diversification to achieve this. Table 6.6 illustrates how entrepreneurs in each firm went about controlling the future.

Table 6.6. How entrepreneurs control the future

NZ	Controlling the future	IR	Controlling the future
COP	Geographical diversification Unrelated diversification	TRO	Product/services diversification (portfolio creation)
CPN	Product/services diversification (portfolio creation)	TBE	Unrelated diversification
CKE	Geographical diversification Respond to environment	TDI	Product/services diversification (portfolio creation) Respond to environment
CET	Market intelligence Focus on vision	THO	Product/services diversification (portfolio creation)
CST	Focus on vision Geographical diversification	TME	Product/services diversification (portfolio creation)
ASM	Focus on vision Product/services diversification (portfolio creation)	TTM	Product/services diversification (portfolio creation)
ALE	Geographical diversification Unrelated diversification	TYA	Product/services diversification (portfolio creation) Reinforcing purchasing power
ACL	Product/services diversification (portfolio creation) Focus on vision	TAL	Product/services diversification (portfolio creation)
AIY	Focus on vision	TAR	Focus on vision
ADK	Focus on vision	TAZ	Geographical diversification Product/services diversification (portfolio creation)

6.4 Effectuation in Practice

Read and Sarasvathy (2005) suggested that understanding how successful entrepreneurs use effectuation may help practitioners and scholars get a better perspective about effectuation in practice. This study found empirical findings to show that entrepreneurs think differently. The stories of participants in this study revealed that all but two firms (TYA and CST) had started business in an effectuative manner, with a small amount of capital, one or a few employees, without a formal office, and even without any specific plans or strategies. Most of them had only a vision to run their own business.

In some cases, required capital injection for development was attracted from a new partner, and in other cases, it was gradually gained during the growth process from the sale of the company. CPN's entrepreneur started his business from his house with his wife. TDI's entrepreneur ran and wrote his first version of the firm's website by himself and in his brother's office. TTM opened an office with one employee and TAL rented a room in a friend's office and bought a cell phone to start his business. All of these entrepreneurs began their businesses with minimal resources, either on their own or with only one employee and often from their own house. They took on the role of seller, designer, worker, etc. at the early stage of their firm's life cycle. Some of them borrowed money from someone else to start the business.

In some of the firms, the first project was very important. If the firm could get the first project, it would start growing. For example, TAR's entrepreneur found his first client and started to work on that project with a few other professionals. This put TAR on the right track for growth. In some cases, firms used their networks to get initial projects. For example, COP's entrepreneur brought three of his clients from his former company. ASM got the first project

from his ex-employer. In other cases, day-to-day operation was on a trial and error basis, and entrepreneurs kept learning about business as they went forward. In contrast, two of the companies, one from NZ and one from Iran, commenced their business in the causation manner with sufficient investment, enough market research, and other required resources like employees, required machinery and so on.

“[In our first project] we also helped the workers, I mean I didn’t have enough money to hire workers, so I worked as a worker, making concrete and providing other requirements.”-TAR

“Look. I didn’t have any academic training in this business. I went ahead as I needed to and learned from experience ... for example, we failed in working with a manufacturer we chose, then we looked for our mistakes and what we did wrong.”-TRO

“I didn’t have any information about the work, I didn’t know what an asphalt factory did, what sand washing was. I had neither academic study nor experience, indeed I was paying attention to learn, after 3 month I had mastered everything.”-TAZ

“Yeah, so the \$30,000 I had was borrowed from my mother-in-law to buy an apartment, and with that money I was able to buy that piece of real estate below market value so I could then get another valuation, and then I took that to the bank and the bank gave me a first mortgage, that being X, and then I was able to leverage off that first purchase to buy more further purchases.”- AIY

“But then I just – I went and hired a digger, a 12 tonne machine from a company, and thought I would see if I can make this work and before starting the business.”- ADK

“Yeah, so, basically, so we did, we started in our Linwood [suburb] townhouse, which was, I guess, looking back now, was a bit of a laugh, but we set up in our lounge.”-CPN

Alongside the growth, a shift from effectuation to causation reasoning occurred over the years with the participating firms. More pre-set goals, planning, strategising, and formal marketing research are the key elements of causation, which increases during business growth. In some cases, the entrepreneurs had done everything at the early stage of the firm. They were the CEOs, accountants, workers, and marketers, but over time their position changed to planners and strategists, to think about the future of the organisation. At the time of interviews, hierarchies were identified in the firms; positions were somehow clear and jobs were divided. Although shifting to causation was observed, it did not mean that the firms completely changed their paradigms. Effectuation was still useful to the entrepreneurs. However, two firms (THO and TAR) still operated in the effectuation manner, with minimum planning and more reliance on networks, market situation, and previous experience. THO was the youngest company, so they may start shifting within a couple of years, and we did not observe any sign of causation in them at the time of the interview. TAR, however, was 7 years old but the entrepreneur still relied on his network to get projects and did not show any indication of causation, possibly because TAR is linked to a governmental organisation. As a result, TAR undertakes projects through this network, and is not concerned about future contracts, so has not started any formal procedures or planning for the future of the company. In Table 6.7, the logic of exploiting opportunities in each firm is illustrated.

Table 6.7. The logic of launching and staying in the business

NZ	Start up	Now	Year founded	IR	Start up	Now	Year founded
COP	Eff	Shift to Cau	2004	TRO	Eff	Shift to Cau	2001
CPN	Eff	Shift to Cau	2007	TBE	Eff	Shift to Cau	2008
CKE	Eff	Shift to Cau	2006	TDI	Eff	Shift to Cau	2006
CET	Eff	Shift to Cau	2005	THO	Eff	Eff	2010
CST	Cau	Cau	2007	TME	Eff	Shift to Cau	2002
ASM	Eff	Shift to Cau	2006	TTM	Eff	Shift to Cau	2005
ALE	Eff	Shift to Cau	2002	TYA	Cau	Cau	2009
ACL	Eff	Shift to Cau	2007	TAL	Eff	Shift to Cau	2006
AIY	Eff	Shift to Cau	2009	TAR	Eff	Eff	2006
ADK	Eff	Shift to Cau	2004	TAZ	Eff	Shift to Cau	2000

Key:

Eff (Effectuation)

Cau (Causation)

Two firms had started their business from the beginning in a causation manner. TYA was established to complete a chain of a family business to distribute their own products alongside the distribution of other products. TYA had extreme experience in the market and injected sufficient capital into the business. CST was more causative with its rigid business plans and strategies and with a vast capital investment. The main reason was the required machinery and resources to commence production. Therefore, it appears that these two firms are more likely to be plan/strategy oriented due to the nature of the business and the way they exploited the opportunity. However, we observed some elements of effectuation such as using networks in causative firms. Causal maps also supported this finding as more causative nodes were identified on the maps in these two companies. These findings are in line with the research by Read and Sarasvathy (2005) and Maine et al. (2014), which found entrepreneurial firms shift to causation and could employ both modes of effectuation and causation.

“We conducted lots of marketing research, maybe we identified about 8000 restaurants, we asked about their needs, realised them, worked and planned on them.” - TYA

“Raising capital has forced us to go through the discipline of writing down our plans, building good corporate models, you know, corporate finance models that represent the numbers behind the plans. And we’ve done that sequentially, year after year, and we’re just going through another version of it, another iteration of it now.” - CST

6.4.1 Organic Growth

Organic growth appears to be a very common pattern of growth among the investigated firms. Development of the firm was a key concern for every entrepreneur. Development strategy to gain needed resources alongside gaining the required investment to grow was another concern of entrepreneurs. We found that most of the investigated firms adopted a strategy of *organic growth* (McKelvie & Wiklund, 2010) to attain their goals.

“So in other words, as opportunity came along and we were able to get a project, undertake a project ... it enabled us to grow in an organic fashion. So that is always our criteria when we're moving into other areas, we always grow ‘organically,’ so we need to, when we're looking at a new city or a new opportunity, it is about: “Can we get organic growth through there?” If it requires a lot of investment and uncertain return, we don’t generally go for that. We're always seeking organic growth, and that’s in our services, in our consulting business, and that’s what we’ve done so far.” - ACL

“It just kind of grew organically, I didn’t write a business plan, it wasn’t a big vision. It was just bring in people as needed.” - AIY

For effectuators, organic growth is a strategy by which firms try to get the resources and investments they need from internal resources. By running a cost-benefit calculation, entrepreneurs decide whether they would like to expand their business. In some cases, entrepreneurs refrained from taking a business partner or any external investors to expand the business. For example, TDI avoided any external investors and developed the company with company profits generated from sales. Further investigation revealed that in many firms, entrepreneurs expanded their firms gradually by acquiring facilities and resources from the business and investing as they needed to.

“We didn’t have any angel investor till now, we invest using our business profits.”-TDI

“One of my keys for success is that I don’t have any business partners.”-TAZ

“So I built an early childhood centre in 2002, as a franchisee, and then gradually bought the franchise, stopped franchising, started building childcare centres ourselves and then buying land to build centres and so forth and so on to the present day.”-ACL

6.5 Conclusion

Running a business with few resources would be a very difficult task but relying on what you have is a predominant way of starting a new business. Fast-growth firms, like other entrepreneurial firms, are likely to use this approach from the initial stage of the firm's life cycle. We found that 90% (18/20) of the firms started their journey using effectuation logic; however, 10% (2/20) had sufficient resources and commenced the business with more planning and clear strategies. After a period of time, the firms started to shift to causation and applied more planning and strategising, setting measurable goals rather than just having a vision. Even with this shift, firms did not completely change their approach to causation alone; they still used elements of

effectuation, such as relying on networks. Two firms were more predominantly effectuate and signs of causation were observed less in these firms than in others. The logic of decision-making and exploiting opportunities was more dependent on the extent of resources they had. The initial part of our proposition about the relationship between effectuation and fast growth, which stated that “*fast-growth firms exploit opportunities through effectuation*” can be confirmed. We will discuss the second part of this proposition in the next chapter.

Chapter Seven: Exploitation Phase. Section Two

Entrepreneurial Marketing and Fast Growth

7.1 Introduction

It was discussed in the previous chapter that effectuation influences firm growth directly and indirectly in exploring and exploiting new opportunities. This chapter examines the entrepreneurial marketing behaviour of entrepreneurs through a wider lens of central concepts using causal maps, which were drawn for each firm. Mapping out the story and trajectory of growth assists the researcher in connecting an entrepreneur's actions together to shape a visual perspective of a firm's activities. By running a central concept analysis, the researcher is able to explore important concepts in each firm and understand which one is more central and crucial to the firm.

This chapter is divided into three parts. The first part discusses the central concept analysis in each firm and identifies the most frequent factors leading to fast growth. The second section deals with the importance of entrepreneurial marketing strategies in the investigated firms. The third part discusses the findings from this research in relation to the research propositions and outlines conclusions regarding the role of effectuation and EM in fast-growth firms.

7.2 What Leads to Fast Growth?

Fast growth is a complicated phenomenon in every firm. There are many elements that can lead to a faster growth. In previous chapters we discussed that serendipity is not the main

reason for fast growth. The results suggested that effectuation and entrepreneurial marketing are two constructs that influence growth; but still an important question remains: What leads to fast growth?

Before we answer this principal question, a word of caution is due. Causal maps assist the researcher to find potential reasons for fast growth. Performing the central concepts analysis displays the concepts with significant future effects in the process of fast growth. Central concepts are nodes with many peripheral concepts surrounding them. Simply put, central concepts are those nodes in the causal maps with many consequences and with more contributions and connections on the map with other nodes and concepts. To find significant concepts in each firm, we decided to conduct this analysis to see how concepts related to other concepts in the map. Concepts with more contributions on the map are considered significant because they will have more effects on the other nodes and the fast growth on the map.

To find a central concept the Decision Explorer[®] software runs a mathematical formula and calculates the rate of being central. The software provides two integer numbers for every single concept; the first one is the rate of being central, and the second one is the number of nodes connected to the concept. The higher the number, the more central the concept will be. To provide a better perspective, we listed the concepts with *more* than **30%** contribution on each map. This is tabulated and shown in Appendix 2. Therefore, central concepts of each map resulting from the software analysis assist in drawing conclusions about the significance of the concepts in each case.

The central concepts of each participating firm illustrated that the applied marketing practices or general marketing activity of the firms was a dominant element leading to fast

growth (see Appendix 2). Summarising and categorising similar concepts leads us to provide a synopsis of the main elements for fast growth. Applied marketing practices in fast-growth companies had the most important influence in growing fast while networks, knowledge and experience, and pricing strategy/high pricing strategy came in second with a minimum distance (see Table 7.1). Perseverance, which is a characteristic of entrepreneurs, ranked at third place. High-quality products and product and services diversification came in fourth place. Planning and innovation was another important element, ranking fifth and finally, learning and presence in the market were elements that appeared in more than a third of the investigated firms.

Table 7.1. The central concepts and frequencies

Rank	Frequency on causal maps	Concept/s
1	14/20	Marketing Practices
2	13/20	Networks/ Communication skills Knowledge and experience Pricing strategy/High price strategy
3	11/20	Perseverance
4	10/20	High quality products/services Product/service diversification
5	8/20	Innovation Planning
6	7/20	Learning organisation Presence in the market Opportunism
7	6/20	Nature of industry/growing industry Profitable projects/contracts Serendipity Divine will /spiritual values
8	5/20	Branding Capital injection Great staff
9	4/20	Organic growth
10	3/20	Credibility Business models Differentiation Exporting Machinery/facility renting Market research/Realised market needs First project

Apart from marketing practices at the top of the table, other important elements revolving around marketing issues such as pricing strategy, product diversification, and presence in the market were observed. Although marketing practices included some of these elements, they were highlighted by the entrepreneurs to emphasise the importance of the role of marketing in their firms. Existence of these elements revealed that marketing practice in general, and some marketing strategies in particular were crucial for entrepreneurs, and many concepts revolved around the marketing activities of firms.

This analysis was cross-checked by the domain analysis, which showed busier concepts. Results showed that some of the central concepts, such as marketing practices and networks, were the same as domain concepts, meaning that the busy concepts were central as well. This result gives assurance to the researcher about the contribution of these central concepts on the map.

Table 7.2 demonstrates the elements of growth in New Zealand and Iranian firms. Results showed that most of the elements leading to fast growth were the same in both countries. There were some differences that can be explained through looking at the different business environments. Figure 7.1 clearly shows the shared elements and differences in New Zealand and Iran.

Table 7.2. Most frequent growth elements in NZ and IR

NZ central concepts	Frequency	IR central concepts	Frequency
Marketing Practices	7/10	Marketing Practices	7/10
Networks/ Communication skills	7/10	Product/service diversification	7/10
Perseverance	6/10	Knowledge and experience	7/10
Knowledge and experience	6/10	High quality products/Services	6/10
Planning	5/10	Networks/ Communication skills	6/10
High quality products/Services	5/10	Innovation	5/10
Capital injection	5/10	Learning organisation	4/10
Characteristics	4/10	Perseverance	5/10
Opportunism	4/10	Characteristics	4/10
Innovation	3/10	Presence in the market	4/10
Exporting	3/10	Pricing strategy	4/10
Great staff	3/10	Profitable projects/contracts	4/10
High price strategy	3/10	Planning	3/10
Nature of industry/growing industry	3/10	Profitable projects/contracts	3/10
Presence in the market	3/10	Divine will/Spiritual values	3/10
Pricing strategy	3/10	High price strategy	3/10
Product/service diversification	3/10	First project/Client	3/10
Profitable projects/contracts	3/10	Nature of industry/growing industry	3/10
Learning	3/10	Opportunism	3/10

Again, there is a cultural difference between Iranian and New Zealand entrepreneurs' perspectives about why growth occurs. These differences have been highlighted by red circles in Figure 7.1. Some Iranian entrepreneurs related their growth to "divine will" or "spiritual values," similar to serendipity. This originates from the entrepreneurs' religious and cultural beliefs. Some Iranians believe that God will help them in their career and guide them to find appropriate opportunities for their interests. However, they do not deny the role of working hard and having the skills and abilities required to conduct business efficiently and effectively. Therefore, divine will or spiritual values, is one of the differences in elements of growth between New Zealand and Iran.

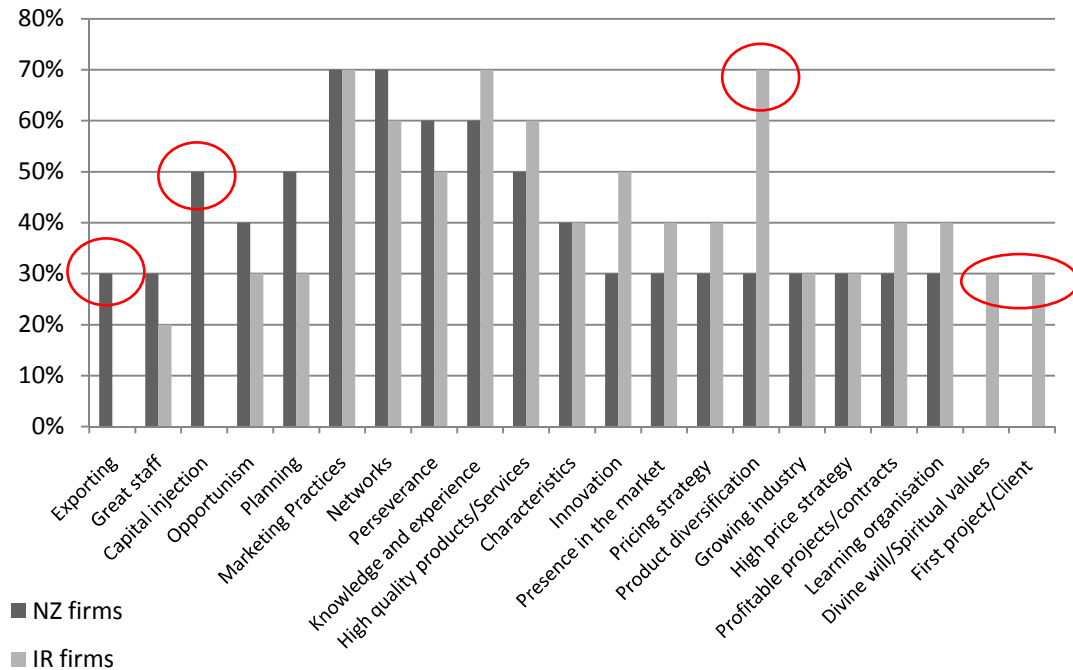


Figure 7.1. Elements lead to fast growth in New Zealand and Iran

The other highlighted difference is the role of the first project or client in Iranian firms. Some entrepreneurs in Iran expressed that finding the first project was very crucial for them, and it accelerated their growth. For example, TTM's first client was a large company, and this contract was valued about 4,500 million rials⁵. This was a large amount of money for a small, new company in 2005, according to TTM's entrepreneur.

Another difference between New Zealand and Iranian firms was that the rate of product and service diversification was considerably higher in Iran. We will explain this difference completely in section 7.3.5. Iranian firms focused more on new product creation, while New

⁵ 450 thousand dollars in 2005

Zealand firms developed new methods and services. Thus, fast-growth firms in Iran focused more on the rate of new products in comparison to New Zealand firms.

Some elements only played a role in fast-growth in firms New Zealand. Capital injection (as we label it) is the concern of half of entrepreneurs in New Zealand. As mentioned, 60% of firms in Iran are family businesses, and the rate for New Zealand is only 10%. In Iran, entrepreneurs get the required money from family members who are partners or could be partners of the firm. In New Zealand, entrepreneurs have to look for somebody who is reliable and willing to invest on the firm or borrow the necessary capital from a financial institution. This justifies why entrepreneurs in New Zealand worry about the money required to develop the business.

“I started to find investors and asked every family member who had money to invest, and I created an interesting formula to pay them back in interest that was more than any bank’s rate.” - TBE

Export to other counties was the other important element in New Zealand. Four firms in New Zealand exported their products to about 40 countries, but the foreign market for Iranian firms only included 4 countries. As most of the Iranian firms operated in the local market, the importance of this item was lower in Iran and higher in New Zealand.

To get a better perspective about the growth in every industry, another level of analysis was done to compare growth components within industries. This analysis also helped us to have a better understanding of the growth elements in every industry. It will help the scholar and practitioners to determine which elements are substantial to different industries.

Of the cases in this study, six firms operated in professional, scientific, and technical services. We included in our analysis any concepts that were central in three or more of these

firms. Three firms were in the food industry and three were in the construction industry.

Concepts that were central in two or more firms for each industry were analysed. There were two firms each in wholesale trade, manufacturing and online shopping and IT services sectors. For these cases, concepts that were central in two of the firms in each sector were analysed. There was one firm in education and training and another in the real estate sector. These two firms were excluded from the analysis to avoid misleading results (see Appendix 2 for details).

In the professional, scientific, and technical services sector, the central concepts in all six firms were marketing practices, perseverance, and planning. Innovation, presence in the market, networks and profitable projects were central in five out of six firms. Results from the interviews may explain why these elements can lead to growth. In this industry sector, innovative marketing practices, in particular innovative ways of finding new customers and staying in touch with current clients are very crucial. TAL's entrepreneur asserted that his firm is one of the leading companies in the marketplace and runs seasonal exhibitions or festivals to tighten his ties with clients.

In the construction industry, networks, knowledge and experience, and machinery or facility renting were central concepts, suggesting these are the important factors that lead to fast growth in this sector. Networks play a vital role in getting new projects in this sector. For example, TAR got all its projects through its networks. Machinery is essential to doing practical jobs and completing the projects and experience helps the firm to do the job with minimum cost.

Central concepts in the online shopping and IT industry were marketing practices, pricing strategy, high-quality products, and product diversification, suggesting these are the top reasons of growth in this sector. High-quality products and pricing strategy were central concepts in the

food industry as well. The wholesale trade sector benefited from pricing strategy, high-quality products, and product diversification. Central concepts in the manufacturing sector were marketing practices, perseverance, pricing strategy, and high-quality products (see Figure 7.2).

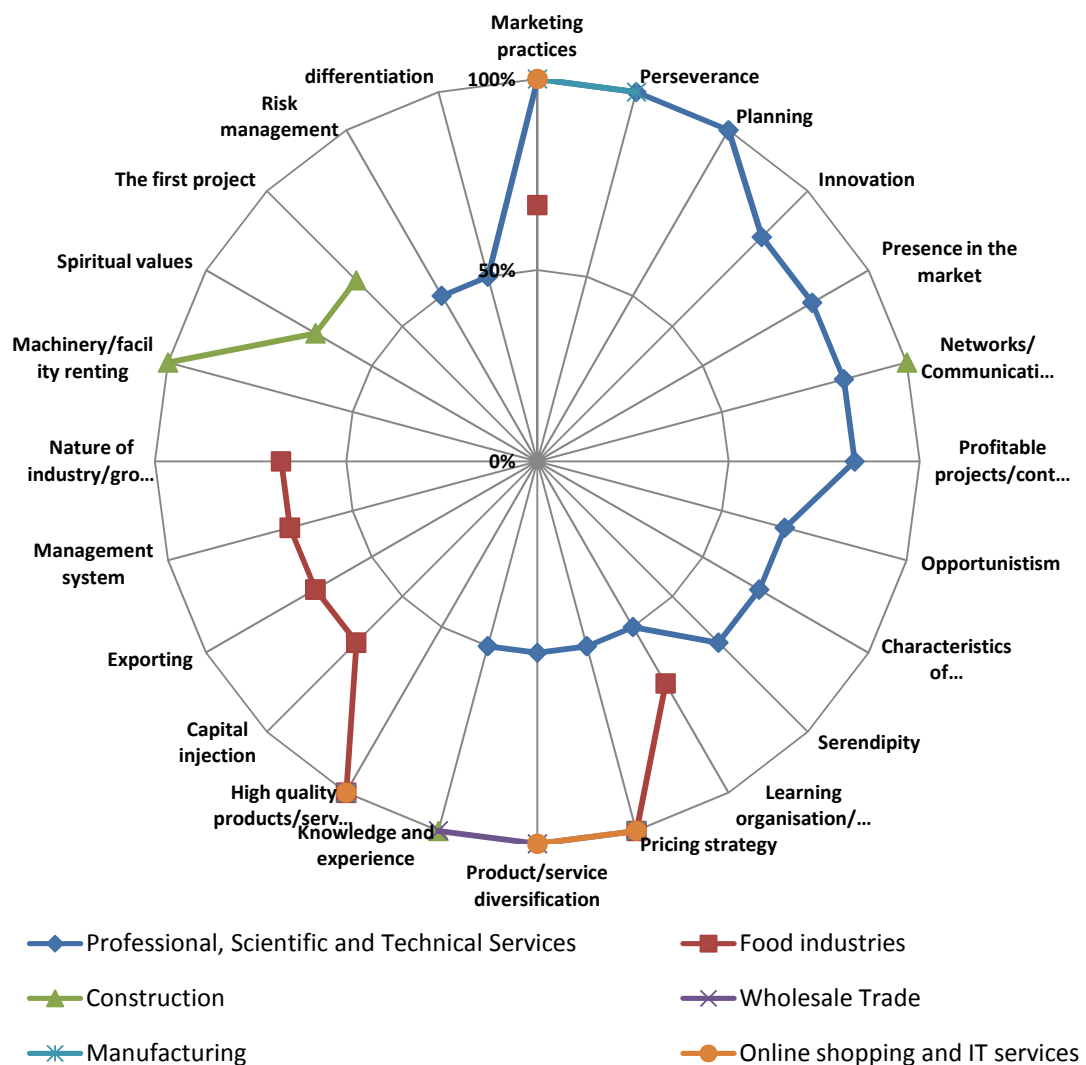


Figure 7.2. Elements leading to growth in different sectors

Central concept analysis showed that there were similarities in the elements leading to growth in fast-growth firms in every industry. Marketing practices, networks, knowledge and experience, and perseverance were common important elements and reasons for growth across all industries. The top elements differed across industries due to the differences in industry type and entrepreneur background. Divine will and spiritual values showed up once again as a cultural difference between Iranian and New Zealand firms, while other elements remained similar.

7.3 Marketing Practices and Strategies: Entrepreneurial or Traditional

Elements of entrepreneurial marketing were seen in the fast-growth firms that were investigated. Marketing practices were the main keys to fast growth in both New Zealand and Iran. Marketing practices in the investigated firms were adapted to the market situation and needs of the firms. For instance, offering premium quality products and services along with higher prices was one of the strategies that the firms employed. Most entrepreneurs believed that if they offered high-quality products at a higher price, there would be buyers in the market that were not sensitive to price. The firms also demonstrated entrepreneurial behaviour and this behaviour showed effectuation logic in many aspects. For example, relying on networks to develop the market, gain resources, and reach customers is an element of acting entrepreneurially and effectually. In addition, entrepreneurs constantly looked for new opportunities through all their available means and market intelligence. Market intelligence was gained by keeping close to the market (presence in the market) and by looking for subtle changes that were likely to affect their business. Similar to the concept of managing by walking around (Peters & Austin, 1985), “Marketing by walking around” is a key strategy to obtain market and customer

information instead of traditional marketing research. Entrepreneurs spent plenty of time around the market to strengthen their relationship with their customers.

Innovation and innovative strategies assisted firms to set their practices and avoid passive action in the market. In particular, innovation played a major role in high-technology industries (e.g. ICT) where entrepreneurs put a lot of effort into increasing the rate of innovation in their companies to gain a competitive advantage. Innovation, particularly in products, was seen more among Iranian firms. In contrast, New Zealand firms tried to be more innovative in their processes and practices. Innovation can be found not only in creating new products and services but also applies to creating innovative methods and procedures (Cummins et al., 2000). Perseverance and knowledge and experience of entrepreneurs were other key elements that were discussed in Chapters 5 and 6.

Overall, most of the elements that lead to fast growth were related to marketing practices and strategies. In the following sections, we investigate the evidence from participating firms to see how they acted entrepreneurially in the marketplace and how their practices fit with the literature on EM. It should be mentioned that we analysed those concepts that were detected in more than a third of investigating firms.

7.3.1 Adapted Marketing Practices

Entrepreneurs develop their own style of marketing (Stokes, 2000b). They adapt marketing practices to suit their smaller, entrepreneurial firms that have limited resources and a willingness to grow. Entrepreneurs in this study thought and behaved in their own style, rather than employing traditional marketing practices. They used the framework of traditional

marketing, but adapted it in a way to service their market faster and more efficiently in terms of cost-benefit.

“It’s something that evolved, we haven’t sat down and taken out the 4P. To be honest, the textbook, you throw it out the door when you start an entrepreneurial business, in my opinion. You don’t want to spend too much time looking at what your business books are saying you should do. You need that structure, I agree ... you need to have a plan, but you don’t want to spend hours on your plan. Plan and strategy, that’s important, but things are changing so quick, you need to have an adaptable strategy and plan.”-CKE

Entrepreneurs shape their unique marketing principles in terms of marketing practices and this is the practical layer of being entrepreneurial (Gilmore, 2011; Gilmore & Carson, 2007; Morrish et al., 2010). The unique ways in which entrepreneurs adapt and innovate in their marketing practices tells more about their way of thinking. Entrepreneurs in every entrepreneurial firm characterised their own marketing methods. To better understand and show the marketing practices and strategies employed by the participating firms, we divided their practices according to the traditional 4Ps. This section explores how entrepreneurs in this study applied marketing practices to the benefit of their firms, how they achieved efficient use of their marketing resources, and how they achieved good returns for their marketing expense. The following section discusses products and services, range of products, price, place (distribution) and promotional marketing methods.

7.3.1.1 Product or Services

Products or services are the first concern of entrepreneurs, especially when they operate in a very competitive or chaotic market. The findings in this area depict that most of the firms in our

study focused on premium quality of their products and services. In many cases, this decision (entering the quality market as they call it) was a pre-set goal or initial strategy. In a few cases, providing the best quality was an unplanned strategy. Most of them just acted according to their gut feelings or insights, because they did not have marketing knowledge or experience, so chose a quality focus. After some time, they thought that this would be a very good long-term strategy for their firms. In other cases, entrepreneurs conducted formal or informal marketing research to understand the needs of the market. Informal research here included experience and market sensing. In still other cases, quality was an ingenious strategy to capture the market and get more customers. Product or service quality strategies can be characterised by three scenarios:

Quality as an unplanned strategy: Some firms chose to produce good quality products, but this was not a planned or deliberate strategy. Sometimes, according to gut instinct, they introduced themselves as producers of high-quality products.

“I think that entering into the quality market was a chance for us. We wanted to produce a good cream, so that anyone who ate it would say, ‘God bless you’... This took us by chance into the quality market with fewer competitors.”-TBE

Quality is what the market needs: In this category, experiential knowledge encouraged entrepreneurs to produce and deliver the best quality products. These entrepreneurs did not have academic training in marketing knowledge. Instead, their feelings and experiences, combined with observations about market needs led them to position their firms in the top-quality market segment.

“My brother was an apprentice somewhere else. I said to him ... let’s think to save this market [from low quality products] as much as we know and have got experience.... We

knew the market and the goods very well and we knew what we should import and in which quality...we were very scared the first few times. We invested all our money into three products, which were 200% or 100% more expensive than in the marketplace. These were very well received...We saw people were looking for high-quality and high-price goods.”-TRO

Quality is a deliberate strategy to get and retain more customers: These entrepreneurs set a goal to produce high-quality products. Their information about market needs and their experience in the marketplace, combined with their marketing knowledge, encouraged them to set quality as their main strategy. This strategy appeared to be more pervasive among the investigated firms.

“...we were thinking of combining variety and quality and the other factors which were in our blood: perseverance, responsibility, and sensitivity to the quality of products. So unlike other merchants, we chose quality.” - TRO

“Our strategy is the best quality in everything; include on our website many facilities like advance search, best delivery. This gives a very good feeling to customers and presents our products very well.”-TDI

“Quality would be ... it’ll be a hundred percent, we have, very, very, high standards... and don’t accept failure at all.” - ACL

“Right. So, we have a very simple philosophy with products. We focus on only having the most energy-efficient product in the market. This is one of our key drivers. We have a level of quality and longevity expectation which is significantly higher than most of our competitors.”-CET

Visions and slogans were other elements that showed to what extent firms focused on the quality of their products and services. In most firms, we could see that the emphasis of the firm was on the quality of its products and services. Consequently, all slogans or visions of the company revolved around the quality of what they offered as well as customer satisfaction. Here are some of the vision or slogans of the firms:

TRO (manufacturing): The slogan of TRO is “the last tools you buy.”

TME (professional services): The slogan of TME is “measure the quality with TME.”

TTM (professional services): The slogan of TTM is “we offer hope, knowledge, and skills with precision, speed, and quality.”

COP (professional services): The slogan of COP is “creating operational excellence.”

CPN (professional services): Part of CPN’s slogan is “we’re pretty good at everything you need.”

CKE (food industries): One of CKE’s slogans is “world’s best pet food.”

CET (manufacturing and wholesale trade): CET’s slogan is “energy efficiency should not come at the expense of good lighting...”

ASM (professional services): ASM’s slogan is “New Zealand’s premium experiential marketing, promotional staff, and brand activation agency.”

ALE (Education and Training): “Come grow with us” is a part of ALE’s slogan. It also has a website describing how important the quality of child education is and what they offer.

ACL (IT services): ACL’s vision is to be “focussed on business outcomes. Driven by technology.”

TBE (food industries): The vision of TBE is “our consumers will proudly say: we use ‘TBE’ confectionary cream.”

TDI (online shopping): This company has listed a page of benefits of shopping on their website. They named about 47 benefits for their customers, mostly about the quality of their services, such as getting the product in a few hours in Tehran, or variety of payment options, discounts or special offers for loyal customers, and special after sales services for customers.

7.3.1.2 Range of Products/Services

The range of products and services is another element important for fast growth. As discussed in Chapter 6, this strategy was employed by entrepreneurs to control the future of the firms and increase profitability of the companies. Entrepreneurs believed that they should not put all their eggs in the same basket, so they made a portfolio of products or services to increase the performance of the firm in the marketplace. To achieve this strategy, firms needed to be very innovative in creating new product and services.

“So diversification is the sort of key strategy there.”- ACL

“We’ve, our whole strategy has been to be full service, so we don’t necessarily have to partner with another business to offer what we do.”-CPN

“One of our advantages is to have a range of products.”-TAL

7.3.1.3 Price

Pricing is a major issue that affects the whole company in terms of keeping or losing a market. This practice was highly connected to the quality of products, as entrepreneurs thought if the quality is high, customers would pay more for their products. They believed that when they offered high-quality products at higher prices, there would be buyers who were not sensitive to price in the market. In pricing strategies, two scenarios were distinguished. The first scenario was a premium-pricing strategy with high quality as the key priority. This strategy not only creates a

high-quality image but also puts firms in the market segment where quality was a focal emphasis for competitors. Participants were asked also how concerned they were to lose their market. Respondents were not very concerned because the quality of their products and services were high, so their customers were very willing to pay more to get more value.

“...we chose this strategy: if the quality is good, customers will buy...”-TBE

“Price is – we are always trying to go in at the top end, and not to get too involved in discounting.” -CKE

“We are at the high end. We’re equal with the highest so we’re not elitist but we charge the higher fees, yes.”- ALE

“Our strategy in pricing could be surprising, it is the highest price. Some say that your services are expensive. We are not expensive – we are high. There is a difference between high and expensive. We are high because we do a different job and it is worth paying more ... I am not afraid of losing our market because I believe top quality from a psychological perspective has a direct relationship with high price in people’s minds. ”- TTM

“We often have a more expensive price, but often that comes with a better return on investment or a better offering for that.”-CET

“We’re selling the products really well, and getting good prices rather than taking discounts to enter the market... so going for high prices for premium quality, by selling to an elite group of customers willing to pay a higher price.... That’s our strategy, so we’re not trying to be the least expensive, we’re trying to, you know, put forth the best quality and attract the best pricing, and that strategy is starting to work.”-CST

In some cases, pricing was based on the firm's bargaining power to sell its products or services. This strategy was identified in two cases; one in the professional services and the other one in wholesale trading. In these two firms, entrepreneurs used their experience and knowledge about the market and set prices based on their perception of the market, power to negotiate with customers, and the customers' willingness to buy. It is notable that this method requires very high-quality services, knowledge, and experience to extend that high price to customers.

"I try to pick some customers that will pay high prices to shift some of the risk to the customer... so this is our way of [pricing] working. Right or wrong, I don't know."-TME

"I'm using some useful daily information from the website of the organization of fruit and vegetable markets, plus my insight and gut feeling. When I go to the market at 3:00 a.m. and I notice the market atmosphere, then I set my price strategy for that day... it is a daily base strategy."-THO

Other firms applied the cost-plus pricing strategy and set prices against their competitors, especially in the service sectors. For example, in some firms, entrepreneurs set prices lower than their competitors in order to secure the project or capture a niche market. In other cases, they used a mixed method of pricing – high prices for some products and low prices for others, depending on what the market needed, what competitors did and what customers wanted.

"Yeah, we do, well we sort of do, I mean, what we've done is we see two risks, and there's one up here, which is the large advertising company, which we compete with, and they're priced well out of the range of small to medium businesses, they can't afford those guys. So what we've done is we've put ourselves in the middle and said, well, we can offer the same services as those guys, and we have the capacity of those guys, but we're priced

more for mid-business, and that's given us an advantage, so we're definitely a better value proposition.”-CPN

“And then the second one [business approach] is the contractors that tip at our sites, which is 80 percent of our income, and our prices are lower than elsewhere so we're very competitive and we're closer.”-ADK

“Our pricing system is cost-plus. Sometimes our competitors do something in the market, but our bargaining power is in the purchasing side in terms of tonnage. This is one of our advantages... and this helps us to keep our prices lower than others in the market.”-TYA

7.3.1.4 Place/Distribution

The Internet was widely used by firms in their distribution methods. All the firms also tried to expand their distribution channels using the Internet. For example, five firms established online shopping and systems of receiving customer requests through their websites. The construction firms, however, did not include online shopping in their methods as this did not make sense considering the nature of the business.

“The channel we use is TradeMe, that's generally where we get most of our leads in terms of, you know, marketing leads which convert to sales.”- AIY

“So our distribution model differs a lot in each country. Within New Zealand, we distribute ourselves to retailers so we end up – in New Zealand, we're the retailer, we're the distributor, we're the manufacturer. We also distribute to other retailers as well. When I'm saying we're a retailer, we sell from the shop next door here and we sell online ... in Australia we are just changing our model to reflect pretty much what we do in New Zealand.” - CKE

7.3.1.5 Promotion and Branding

One of the essential elements of marketing is promotional practices, and increasing awareness about the company, its brand, and its operation so that the company is well-known to people and customers. It is highly notable that the majority of the investigated firms did not employ traditional promotional methods such as TV and radio advertising or outdoor advertising. Instead, they focused on using other inexpensive methods with higher influence on their target markets.

“Our primary customers are, as I said before, electrical engineers who design buildings. I know exactly how many there are in New Zealand and we know who every single one is, because there is a finite number of them.” -CET

“I don’t believe we have to spend huge amounts of money on advertising and go for the best media coverage to introduce TTM ... what shows our services best is our customer satisfaction...everything else goes from A to Z but marketing goes from Z to A.” -TTM

The sagacity of entrepreneurs led them to target the market with less expenditure and more efficiency rather than using traditional methods. Data showed that B2B firms did not use modern communication styles like the Internet as much as other firms. In one case, we observed some traditional methods that were used efficiently by sending brochures and CDs to the targeted segments.

Table 7.3 shows three types of Internet-based communication used by the firms in this study. Triangulated investigation of the firms showed very heavy usage of modern forms of communication such as websites, social media, and blogs. Entrepreneurs knew these forms of communication allowed them to communicate their business to customers, let people know the

advantages of doing business with them, and helped them to be in the minds of their customers.

Websites were the main methods of communicating with target markets, along with social media and personal or company blogs. Social media and personal or company blogs helped firms to share their latest news, new ideas, and other important information with their clients and assisted them in understanding their customers.

Table 7.3. Communication method of firms to their clients

NZ	Type	Website	Blog	Social media	IR	Type	Website	Blog	Social media
COP	B2B	Yes	No	No	TRO	B2C	Yes	No	No
CPN	B2B	Yes	No	Facebook, Twitter, Pinterest	TBE	B2B	Yes	No	Facebook
CKE	B2C	Yes	Yes	Facebook, Twitter, Flickr, Youtube	TDI	B2C	Yes	No	No
CET	B2B	Yes	No	No	THO	B2B	No	No	No
CST	B2B	Yes	No	No	TME	B2B	Yes	No	No
ASM	B2B	Yes	Yes	Facebook, LinkedIn	TTM	B2B	Yes	Yes	No
ALE	B2C	Yes	No	Facebook	TYA	B2B	No	No	No
ACL	B2B	Yes	Yes	Twitter	TAL	B2B	Yes	No	No
AIY	B2C	Yes	No	Facebook, Twitter	TAR	B2B	No	No	No
ADK	B2B-B2C	Yes	No	No	TAZ	B2B	No	No	No

The nature of the target market and type of customers a firm had determined whether the firm launched a website. Websites were not important for some businesses. For instance, with the construction companies, credibility, previous work, experience, and existing networks served as the marketing strategy. Another example was seen in the wholesale sector, which was characterised by clients who were either not keen about looking at websites or had no need to look at websites to find suppliers. All New Zealand firms had a website, and in Iran, two construction firms and two wholesalers did not, but other firms did.

In contrast, websites were a very important part of doing business for some firms, such as ones involved in online shopping and IT services. For example, TDI had an outstanding website⁶ that was very successful in creating a mutual relationship with their clients. TDI claimed that in order to help their customers have a better understanding of what they wanted to buy, they had created more than 100,000 posts of website content, including videos, reports, and news in the last five years. On the product review section of their website, they have established a TV-like section, which compares and reviews the products TDI sells. Customers are actively interacting with the website, especially for TDI's product reviews, which are great sources of information for prospective buyers.

Social media was actively being used by New Zealand firms, where 60% had social media accounts, and some were using more than one type of social media. In contrast, only one firm in Iran had a Facebook page, which was not very active, and it was limited to a few photos and some information about the company. The main reason why Iranian firms do not use social media goes back to a governmental policy blocking social media, so these businesses could not actively leverage the benefits of these types of communication.

Blogs were considered a method of communicating with customers. Some of the firms in New Zealand and Iran actively used this method for establishing mutual relationship with their clients. In New Zealand, three of the companies applied this method to communicate better with their followers, while only one had a blog. This entrepreneur uses the blog to write about his

⁶ TDI has been awarded as the best online shopping website in 2008, 2013 in Iran especially for the quality of the website.

memoirs and the business and publishes new information and articles for the benefit of his readers and clients.

Although some firms launched websites, their functionality was less significant than networking and word of mouth. For instance, one New Zealand construction firm and one New Zealand wholesale firm both had websites, but their websites were very simple and static and gave limited information about their companies. Networks and word of mouth were much more important than websites in promoting companies and their products. Word of mouth was another important element of promotion that brings great benefits to the company at low cost. This is consistent with the findings from previous studies that entrepreneurs rely on word of mouth to promote their company in the marketplace (Gilmore, 2011; Stokes, 2000a).

“The other side of the promotion is really getting – is word of mouth ... we don’t go down the route of the traditional TV, radio, newspapers. It doesn’t work for us.”-CKE

“A lot of my business comes from word of mouth so the people that I meet, the people I do business with. I attend a lot of – well, not so much at the moment – but I used to attend a lot of networking events.”-ASM

“People, people is promotion for us. We, I’ll give you a good example, we re-did our website last month, or over the last few months, for the first time in three years. So, we hadn’t touched our website for three years. Since we started ECT it hadn’t changed for three years. And we’re doing lots of other different things. That’s how unimportant our website was to us because we were 100% business-to-business.”-CET

Networks, word of mouth, Internet, and other innovative methods boosted the firms’ brands. Entrepreneurs believed that these tools, sometimes altogether and sometimes

individually, helped them to improve their brands. Word of mouth, especially when the quality was more than acceptable, assisted them to keep their brands at the top of people's minds. Apart from the Internet, being present at fairs and exhibitions was a way of building and reinforcing the brand of the company. There were other low-cost, innovative ways entrepreneurs boosted their brands. For example, TTM's entrepreneur included his firm's catalogue at the back of each book that was published. Some entrepreneurs wrote articles in magazines and newspapers to promote their brand and inform people about what their companies did.

"Websites are very influential but very cheap tools, especially in Iran with many youth...being at fairs, exhibitions and conferences [to promote our brand]... and I forgot to say one thing – our books –especially my books, what I did for the first time in Iran, I published our brochure at the end of the book, imagine a 250-page book about sales management, and on the last 10 pages there is a brochure for the company. People read and enjoy the book and at the end they get familiar with our activities."-TTM

"Yeah. Well, I do a lot of blogging so, you know, research that, I have a lot of blogs in Idealog magazine." - ASM

"We are focusing hard on brand, so through our website, through our, you know, physical signage and so forth."- ALE

"Our website's vital for us. We're lucky we're in this age we are now that, you know, we couldn't be doing what we're doing now without a website. So we're very fortunate in that regard. Social media also becomes an important angle for us. We're looking at implementing a very extensive social media campaign at the moment."-CKE

Brand power was a major concern for entrepreneurs. They needed their clients to remember them and much effort was devoted to staying at the forefront of people's minds. Some firms did a huge amount of free or highly discounted work in order to attract customers to the company, introduce their brand, and establish themselves in the market. By leveraging such efforts, they penetrated the competitive market and by supplying great quality products, they promoted their companies as some of the best firms in the market. Therefore, it can be concluded that these are widely used marketing strategies that pave the way for reaching goals and speed up the process of fostering brand awareness, especially at the early stages of the company life cycle.

"The second part of that though, is being "top of mind," and that's where I think that "chance" comes along and then you can influence chance there a little bit... but the other path that affects "chance" is being "top of mind" as well."- ACL

"And to be honest, we did a lot of free work in our first year, you know. We basically approached clients that we wanted and said, look, we will do the first 10 hours for free, to prove ourselves, and if you think we're up the task after that, then we'll estimate work. So, it was quite a bold move, and I think it shook up a lot of our industry, but it was something that hadn't been done before, and it got us a foot in the door, to at least have that opportunity, and obviously from that opportunity we made the most of it."-CPN

"In our early years, our policy was cutting the prices, we were selling our product with minimum profit, I don't know this policy was right or wrong but we attracted many clients, actually our big clients came to us just for our price, but afterward, we slightly increased our price to the level of powerful companies."-TAL

7.3.2 Relying on Network

Marketing by networking (Gilmore & Carson, 1999; Gilmore et al., 2006; Stokes, 2000a) is a distinctive strategy among the fast-growth firms. This type of marketing is also a reliable method for accessing cheaper resources in greater quantities for small firms. As previously mentioned, personal and business networks were the main sources of serendipity. Networks were also vital elements in marketing practices. Entrepreneurs leveraged their networks to reach their target markets and gain more resources. Networking was the cheapest marketing method and enabled entrepreneurs to gain more benefits than employing traditional marketing strategies such as STP.

“I do a lot of networking and the networking led to more referrals, that’s how it happened.” -ASM

Our findings show that there are four different ways the firms benefited from using networks. The first benefit is obtaining required resources. Entrepreneurs leveraged their networks to access more resources and this helped them to acquire resources quicker, cheaper, and easier. Saving money is a cost benefit for entrepreneurs, and they could create competitive advantage through it.

“It [Networking] means we can find the right people, the right technical skills, but also at the right price, but also quickly as well, and those are the key factors that make a difference for us when we are small and competing with no track record.” - ACL

“When I wanted to start my own business, I gained credit to start my own trading through my former employer. He [former employer] called [my supplier] and gave assurance to them and asked them to give me whatever I needed.” -TRO

“I am able to buy a huge load [of raw materials] on credit just by a phone call through my networks. Others can’t do that, even if they pay by cash.”-TAY

The second benefit is that it allowed firms to reach the right clients and customers. Using networks is especially crucial in helping new businesses gain the first client or get the first project. This is also a cheaper way of targeting customers compared to traditional marketing and broad advertising. It decreases the cost of reaching the target market and speeds up the process of finding new customers. Many entrepreneurs in participating firms found their first clients to start the business through their networks.

“[My first client]: Well, actually with my employer from Sydney ... my ex-employer. He said, ‘... I need some promotional stuff at the Big Day Out, have you heard of that music event before?’”-ASM

“[My first client]: Yeah. How it actually, well basically I brought three of my clients with me.”-COP

“I had a network with the company and after four years I signed my first contract with the CEO.”-TAR

“I found my clients, say 80% to 85% of my clients and projects, in a classroom when I was teaching. Most of my MBA students are entrepreneurs or managers and if they trust me as a professional consultant, potentially, they will become my clients.”-TTM

Some of the entrepreneurs did not have established networks, so they started to build their own to reach the right clients. This process was very time-consuming but the results were satisfactory for them.

“[First client]: It probably involved drinking about 200 gallons of coffee, over a period of several months, so right from day one and, you know, for all my career here in New Zealand I have been visiting and having coffee with contacts in the industry, talking and looking to see if they have technology problems and seeing if we can find a way of supplying that solution.” -ACL

“Eighty-five, ninety percent of the work that I got and won was from me walking up to a door, knocking on it... ‘I just wondered if I could give you my card, we’re looking for places to put fill.’” -ADK

The third benefit is that networks allows entrepreneurs to get new ideas and explore new opportunities. Sometimes networks serves as a facilitator in marketing research and getting information about the market. We will discuss this item in section 7.3.2.

“[To get the idea of starting the current business] I met him a couple of times at the airport and he was a friend of a friend and he was talking about it with me.” -ALE

The fourth benefit is that networks help entrepreneurs to find business partners who are interested in investing in the business. Networks facilitate the process of meeting and finding reliable partners.

“[Name] my business partner joined. He was a former client of mine back in 2000.” -COP

“Then I met my current business partner, and he was working in the lighting industry and wanted to start up his own business, so between us we started our own business.” -CET

Overall, the role of networking in marketing is as important as its role in serendipity occurrence. The benefits of networks are categorised into four groups: *access to more resources, reaching the target market in better, cheaper ways, exploring new ideas, and finding business*

partners. These are all ways networks benefited firms in this study. Networks are highly important for entrepreneurs, and entrepreneurs maintain and improve their businesses and social networks. Networks facilitate marketing practices in entrepreneurial firms and lead to saving time and money. They also increase the efficiency of marketing practices in smaller firms.

7.3.3 Knowledge and Experience

As previously discussed, most of the entrepreneurs had previous knowledge or experience or had a partner with the required knowledge (see Sections 6.3.2 and 6.4.2). Knowledge and experience is an element that influences the growth of firms. Its importance is highlighted, particularly in the construction, wholesale, and professional, scientific and technical services sectors as there is a greater need for professional knowledge in these sectors than in others.

7.3.4 Perseverance

Perseverance (hard work) is among the distinctive entrepreneur characteristics and a source of serendipity. Perseverance influenced fast-growth in more than a third of the participating firms. The majority of entrepreneurs maintained that this was the main reason for their success and there was no success without working hard and insisting on their vision to be successful.

“I don’t think you get anything in life worthwhile if you don’t work hard. Everything you ever achieve, it doesn’t matter what it is, what will give you satisfaction will be the things that were the hardest for you to get.” -ALE

“If you want to be number one at whatever you are doing, you should have tenacity.” -TRO

“[Behind our growth] is the so, so, so, so, so, so, so, so, much energy that I spent on it.” -TME

7.3.5 Innovation

Innovation is an element that was employed by fast-growth firms in two facets: innovating new products and services and developing creative methods of marketing or other processes. New Zealand firms focused more on innovative methods of marketing and serving customers, while Iranian firms concentrated more on physical product innovation. Iranian firms create more new goods while New Zealand firms created more new methods and services.

“Yeah. For us now it’s [innovation] about offering new ways of engaging with consumers.”-ASM

“I personally think that the greatest reason for our growth and keeping it is using new ideas since we started and now we always use very novel ideas.” -TDI

“We use some very pretty innovative mechanisms and methodologies for pricing ... Specifically, we're looking at diversifying the type of work that we do. We have pretty diversified offerings. We do quite a few different things in technology.” -ACL

“We don’t like to be the leader of selling in the market, we would like to be the leader of innovation and quality.” -TBE

This difference could be explained by the different markets and cultures in New Zealand and Iran, whereby the culture of offering high-quality services and focusing on procedures are more established in New Zealand than in Iranian firms. Additional evidence from economic indexes shows that 70% of New Zealand’s GDP comes from services, while this rate for Iran is only 45%. This also suggests that innovating services and marketing methods is more important and established in New Zealand culture than in Iran, where most of the entrepreneurs believed in product quality, and sometimes neglected to improve their quality of service and methods of

marketing practices. In contrast, the importance of marketing and serving methods was paramount to New Zealand entrepreneurs, so the focus was more on procedures of serving customers rather than just developing new products. Innovation was also a key element, especially in IT-based firms that struggled to keep up in rapidly changing markets.

“... [We] set up a new operating culture, which we felt would be more effective in the market.”-ACL

“Every year we try to create an innovative product for our customers in our field.” -TAL

7.3.6 Planning

Planning is another element that influences fast growth. Fast-growth firms shifted to causation after a number of years and employed more planning in strategic decision-making (see Chapter 6). The future of the firm was a major concern for entrepreneurs, so they try to keep the firm on the right track and in line with their visions and goals. At the beginning, this was seen as commitment to the vision of the firm but over time, it appeared that more planning was required.

“We have got it on our list to basically put down written values and, you know, company sort of policy and that sort of thing ... but it’s something I probably need to spend some more time on.”-ADK

“We are among the rare companies that have annual planning and you as our customers know when we offer our sales and when our exhibition is.”-TAL

To better understand the role of planning in fast-growth firms, we developed a comparison between two causative, two effectuate, and the remaining firms (see Chapter 6) in the study (see Figure 7.3). Two of our participating firms started business in the causative

manner, while the rest of them started business using effectuation logic. Two have remained effectuators. In both of the causative firms, planning was widely used while neither of the two effectuative firms used planning. Of the remaining 16 firms that started shifted to causation, the rate of planning implementation was 38% (6/16), which meant a slight increase in the planning. Figure 7.3 shows the rate of planning in the investigated firms.

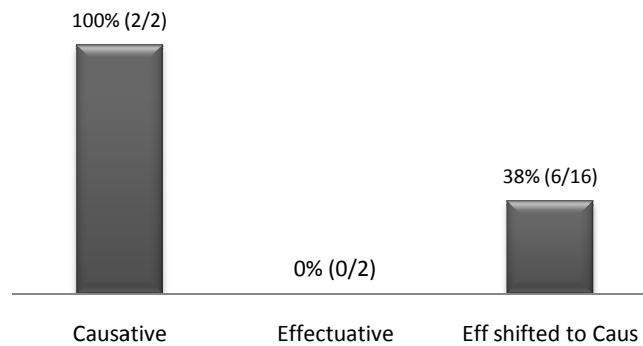


Figure 7.3. Planning in fast-growth firms

7.3.7 Learning

Learning is another element that influences fast growth. Learning in this context refers to learning from mistakes and failures and gaining more experience. This encompasses all aspects of organisational activities. Based on the results, it appears that entrepreneurs learn how to manage their firms and how to use opportunities over time. As participants' firms grew, this learning helped them to manage their business practices efficiently.

“If you start little you’ve got the advantage of learning as you go. Learning from mistakes that aren’t too big, and we keep making mistakes, but as long as the mistakes you make aren’t terminal you can get to the next step and the next step and so forth.” -ALE

“One of the things that made us successful was learning from our mistakes.” -TRO

“When we miss an opportunity, we don’t sit back and moan, we try to review the reasons for failure, learn from mistakes, try to strengthen the weak point.” -TTM

7.3.8 Market Intelligence (Market Research and Presence in the Market)

Market intelligence in entrepreneurial firms is gathering information about the market and competitors in an informal method of personal observation and being in touch with customers, mostly through networks (Jaworski & Kohli, 1993; Stokes, 2000a). Market intelligence in traditional marketing is gained through formal marketing research, while in entrepreneurial firms, it is informal and based on personal observation (Stokes, 2000a, 2000b). Market intelligence is gained by keeping close to the market and looking out for subtle changes that are likely to affect the business. “Marketing by walking around,” instead of traditional marketing research, was the main strategy used entrepreneurs in this study to obtain market and client information.

“Sitting behind the desk provides a very limited angle to observe the market, when we go into the market we see something that others cannot.” -TTM

In the firms investigated, entrepreneurs spent considerable time in the marketplace to strengthen their relationships with customers. They acquired needed information from the marketplace through personal observation and networks. These findings showed that the firms applied market orientation to be alert and aware of the marketplace through informal procedures and in a very cost-efficient way.

“...We travel a lot. We go, we go, we always foster strong relationships with our overseas suppliers who are in different markets and know different things than we do.” -CKE

“I myself once or twice a week go to the market and talk to our customers about our cream and our competitors’ products.” -TBE

“Best market research is with your shoes...And we use a lot of face-to-face time, so before we did anything else I’d jump on the plane and go and see the customers, potential customers.”-CST

Networking is again another method of getting information from the market instead of paying large amounts to market research companies to run formal traditional market research.

“Yeah, it’s an interesting one that one – all depends. Yes, overall, in terms of how and what, that’s probably where the difference comes into play. If you look purely in the retail sector, market research means going and paying \$65,000 to X and everyone else for that data which, to me, I just won’t pay. So the approach we’ve taken there is actually working for the supermarket traders with the likes of Progressive and Foodstuffs – they have that data, they’ve got access to that data. One of them, I won’t tell you who, freely gives us that information. The other one expects us to pay for it.”-COP

“So again we’re sort of, yeah, all forms of – we haven’t got the deep marketing budgets or research budgets, so again a lot of it is through networking.”-COP

7.3.9 Opportunism

Searching for novel ways to create value for customers (Morris et al., 2002) in terms of new opportunities is another characteristic of fast-growth firms. As discussed in earlier chapters, entrepreneurs of fast-growth firms continually look for opportunity. The ability to search for and realise new opportunities developed over time, and as firms grew, entrepreneurs become better at finding new opportunities.

“My point of view has changed, now I can see some opportunities that I couldn’t see before.” -THO

“We were growing steadily, looking for opportunities and bringing people into the business.”-ACL

“There’s many more opportunities that we’re finding now, than at the beginning. Yeah, yeah. Because as you get bigger and you build your capability you can always see more opportunities.”-CST

We also found that entrepreneurs leveraged the environment to create new opportunities. This ranged from disasters, such as earthquakes, to enhancing their competitive positions.

“I mean, you could say that the earthquake was very lucky for us, but we used the earthquake as an opportunity to grow so a lot of our competitors let go of staff, downsized because of uncertainty, we snapped those people up straight away and then worried about finding the work afterwards.” -CPN

“No, I think as we grow, it gets, as long as we have the right attitude, there are more opportunities that open up, because we are putting ourselves in positions that can create those opportunities, so I think it’s forever.”-CKE

Entrepreneurs showed a tendency to think differently in comparison to ordinary people. They were always looking for new opportunities and had the ability to spot a new opportunity when it presented itself.

“So I’m always looking for an opportunity, for an angle, for some different way of doing things.”-ASM

“I am a very opportunistic type of person in a positive way, what happens to me unconsciously –I think, what I can do with that, could it work for me?” –TME

7.4 Fast Growth in Effectuative and Causative Firms

The top elements of growth differed between effectuative and causative firms. As previously discussed, there were three groups of firms in this study. Two of them started causatively and are still causative, but demonstrate some elements of effectuation such as relying on networks. The other group started effectually and shifted to causation. Two firms in this group are still operating effectually. The elements of fast growth that were observed in more than half of the firms for each group are presented in Figure 7.4.

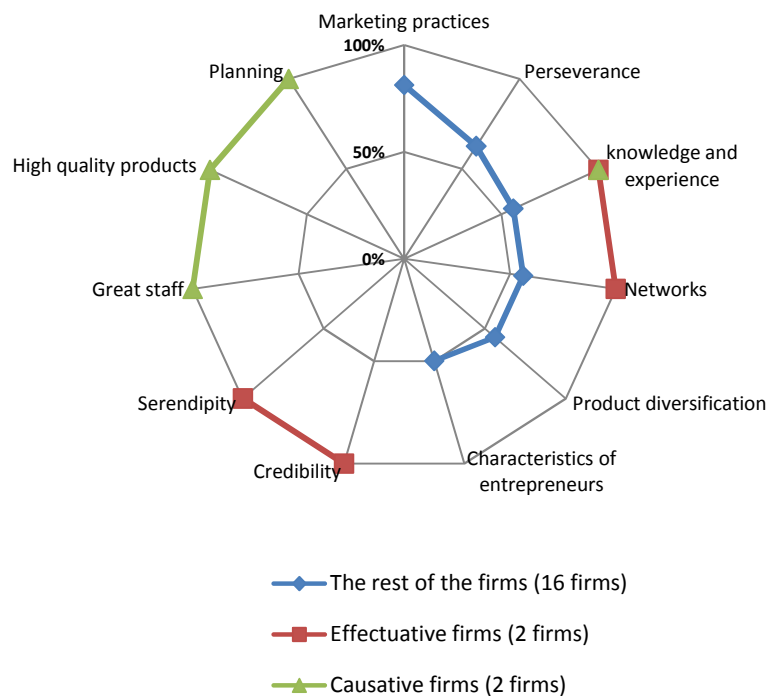


Figure 7.4. Top fast-growth elements in effectuative and causative firms

Effectuative firms relied on networks and leveraged contingencies (serendipity) and their credibility in the marketplace. Causative firms, in contrast, relied on planning and high-quality

products as a strategy and had qualified staff, which could be the result of a planned recruitment system. The firms that started effectually and started to shift slightly towards causation employed marketing practices, perseverance, networks, and characteristics of entrepreneurs as elements that led to fast growth. Firms in all three groups shared knowledge and experience as an important element leading to fast growth.

In conclusion, fast-growth firms demonstrated elements of EM in their marketing practices. In previous sections, we examined the top elements that led to fast growth in the participating firms. We investigated the elements that were present in more than a third of the fast-growth firms in this study. The evidence of practices and elements in these firms suggests that they act entrepreneurially to adapt their practices to the requirements of the market.

Fast-growth firms perform entrepreneurially in two aspects: EO and EM. Employing the elements of innovation, risk-taking and proactiveness determines to what extent the firm is entrepreneurial (Miles et al., 2011; Morris et al., 2002). A proactive approach is a combination of innovation and risk-taking, which is followed by effective resource leveraging (Miles et al., 2011). Marketing is a source of innovation, giving guidelines to finding new opportunities to produce new products and services. As discussed in earlier chapters, most of the entrepreneurs in this study were risk-takers but managed the risk to avoid major failures. They were innovative, either in creating goods and services or in processes and marketing. They were also opportunists, constantly looking for new opportunities, especially through their networks. All this evidence leads to the conclusion that the fast-growth firms demonstrated the EO aspect of EM.

Fast-growth firms also demonstrated the MO aspect of EM, by gaining market intelligence, particularly through personal networks and observation (Jaworski & Kohli, 1993;

Stokes, 2000a). This part of EM is highlighted in the marketing practices of the firms that tried to get market information and keep themselves close to market changes. Again, the role of networks as an instrument to gain market information rather than relying on traditional marketing research is significant. It is proposed that participating firms performed entrepreneurially through employing the MO aspect of EM, and this assisted them to have access to market information accurately and quickly.

Adapted marketing practices and marketing by networking are the other facets of acting entrepreneurially in the marketplace (Gilmore, 2011; Gilmore & Carson, 1999). There is sufficient evidence that both marketing practices and networks were very crucial elements in the fast-growth firms of this study and that they significantly influenced the growth of the firms. Causal maps also confirmed that networks directly and indirectly influenced both serendipity occurrence and achieving fast growth. The maps showed that marketing practices directly and indirectly influenced growth as well. Therefore, it can be concluded that the investigated firms performed entrepreneurially in two dimensions: relying on networks and adapting marketing practices.

These findings lead to the proposition that the investigated firms were innovative, risk-taking and proactive, with the ability to search for novel opportunities and adapt marketing practices, relying on networks and market intelligence. The existence of these elements in the firms leads us to consider them as entrepreneurial firms displaying entrepreneurial behaviour. This approach is also in line with what Morrish and Deacon (2011) describe as EM, which is a combined method of entrepreneurial behaviour and marketing that is far from existing traditional marketing theories. In the domain of EM, the decision-making role of entrepreneurs is in the

centre, the information from the environment is on one side, and the marketing actions of entrepreneurs is on the other (Hills & Hultman, 2011a). In most of the cases in this study, entrepreneurs were decision-makers, and they tried to personally capture information from their turbulent environments and respond appropriately to that environmental information.

In conclusion, causal maps showed that well-executed entrepreneurial marketing practices followed by effectuation logic leads to the achievement of fast growth. These findings are consistent with the theoretical framework of EM (Hills et al., 2010; Hultman & Hills, 2011), which describes a mutual relationship between entrepreneurs' behaviours and turbulent environments. This framework combines the internal marketing process, which includes effectuate thinking, continuous re-evaluation, and intuitive practices with market condition, which is very dynamic, innovative, and competitive.

7.5 Conclusion and Proposition

Effectuation and EM combined are instruments that fast-growth firms employ to exploit opportunities and affect growth. We found that most of the firms started their businesses in an effectuate manner with few available resources. However, over the years they shifted slightly to being causative. At this stage, the firms had procedures that were more formal; the jobs were divided among staff and entrepreneurs thought more about the future of their companies, rather than about day-to-day issues.

“[Future of the firm], I think it's having the vision of where you want to go to next, and having a grand plan that it will go some years after and having a vision for what sort of size the company will be.”-ACL

The exact turning point from effectuation to causation was not clear, and some elements of effectuation, like networking, considering affordable loss, and controlling the future, were still observed in most of the firms. Nevertheless, the ratio of planning and monitoring of the market through a formal process increased when the firms developed. Consequently, most of them are now using a combined logic of effectuation and causation. They apply both logics based on what they need (e.g. networks or referring to their previous experience). Among the investigated firms in this study, all but two of them came into business with few resources. Having sufficient resources can be key to using the logic of causative or effectuative decision-making. For instance, in the two firms with sufficient resources, the logic of planning, researching, and other elements of causation were highlighted, while these were not prominent in the other firms.

Entrepreneurial marketing strategy is dominant in fast-growth firms and is mixed with effectuation logic. As far as our analysis shows, entrepreneurs look for some type of strategy that is innovative and productive and is different from traditional marketing. They position their firms in safe and secure parts of a market to avoid fighting with other competitors. Most of them spend time making their products and services unique in comparison to their competitors. Most of them focus on higher prices alongside high quality. This may help them to have more profits and gain a competitive advantage over their competitors. In short, in fast-growth firms, entrepreneurs capture the spirit of entrepreneurship in terms of being opportunistic, risk-taking, and innovative and synthesise this spirit with their marketing practices and market intelligence. All of this is combined with effectuative thinking in order to get the most from the existing market. Fast-growth firms in this study shared EM and effectuation elements like relying on networks, using the resources at hand, and found innovative ways to use available resources and achieve control of the future by implementing strategies such as portfolio creation. In other words, they employed

both EO and MO aspects of EM. According to Covin and Slevin (1991), entrepreneurs are risk-takers in their decisions regarding investments and returns. Our findings support this point of view that entrepreneurs calculate the risks they want to take. Findings from this study also support the view that at the level of production, firms should be innovative in the face of technology changes and should try to become leaders in the market, as the firms investigated proved to be very innovative. Finally, findings support the view that at the third level, entrepreneurs have a pioneering nature against their competitors in the market. Most of the firms in this study wanted to be leaders, especially in regards to the quality of their products. Gaining market intelligence through networks also confirms that the MO aspect of EM was applied in the fast-growth firms.

Based on these findings, effectuation logic and EM can be regarded as complimentary elements. Some elements of effectuation, like networks, are applicable to both marketing activities and finding resources to exploit new opportunities, which can expand the business and lead to fast growth. As most of the firms were young and had limited resources, they could not spend much on marketing. They preferred to use innovative methods at minimum cost to reap more benefits. For doing so, they used all available resources at hand, and this is very similar to effectuation logic. It should be mentioned here that two of the firms performed causatively and used planning and pre-set goals more than the other firms. Although these firms were causative, some elements of effectuation, like relying on networks, risk-taking, and affordable loss were observed in them. Therefore, the logic of these two firms was a combination of predominant causation, effectuation, and EM.

It was discussed earlier that effectuation is a proper approach for entrepreneurial firms as a result of hyper-competition and low resources, and that what differentiates EM from traditional marketing is, in fact, effectuation thinking (Hills & Hultman, 2011a; Hultman & Hills, 2011). Taking acceptable risks alongside being very cautious about the finances, being innovative to reduce the cost of marketing activities, and gaining information about the market through networks rather than traditionally (Stokes, 2000a) are all examples of being effectuate rather than causative. Cluster analysis enables a visual perspective (see Chapter 8 and Appendix 1) of the real world by showing all essential elements in the model. Accordingly, we confirm that decision-making practices in EM and in effectuation logic are likely to be very similar and lead to fast growth in firms. Some scholars argue that many fast-growth firms are considered entrepreneurial (Das & He, 2006; Larson, 1992) and pursue growth using innovative strategies. Thus, combining this point of view with findings from this study strengthens the idea that being more entrepreneurial, rather than traditional, leads to fast growth. We also confirm that the application of effectuation logic alongside EM leads to fast growth. Taken together, we confirm proposition P₂ that *fast-growth firms exploit new opportunities through effectuation, using EM to achieve fast growth.*

Chapter Eight: A Model for Fast Growth

8.1 Introduction

This chapter revisits the proposed model from serendipity to fast growth and confirms that the suggested conceptual model is supported by the investigated firms based on the analysis conducted. In this chapter, we conclude that serendipity, which brings new opportunities to firms, is likely to happen at the start of the growth process. Additionally, effectuation thinking and entrepreneurial marketing are intertwined and likely to occur simultaneously as methods of exploiting new opportunities that lead to fast growth.

8.2 Support for Conceptual Model

The proposed model represents a process of fast growth with respect to the multilateral relationships between concepts. To verify the conceptual model, each firm had to be investigated separately, although the unique growth stories of the firms made it difficult to develop an integrated model. However, we were able to analyse the relationship between the nodes in every single causal map of the participating firms. In the proposed model, serendipity occurs at the beginning of the growth process. This is level 1 in the model. Level two of the model represents the creation of new opportunities for the firms (exploration phase). Growth is mediated by two significant activities used to exploit new opportunities: effectuation logic and EM. This comprises level 3 of the model (see Figure 3.3). As illustrated in Figure 8.1, serendipity may lead to new opportunities and in order to exploit these opportunities, entrepreneurs apply effectuation logic and use entrepreneurial marketing to achieve the growth. However, as findings show, this relationship is not unilateral. As discussed in earlier chapters, networks, pure luck, perseverance,

high-quality products, and other elements are sources of serendipity. Elements of effectuation and EM are among these sources. This means that effectuation and EM alone can bring new serendipitous opportunities to the firm. Environment, credibility, and the reputation of firms can also bring new opportunities. Therefore, it can be concluded that despite its unique resources, effectuation and EM can bring serendipitous opportunities to firms as well. This shows that the relationship between serendipity, and effectuation and EM is multilateral and environment is a moderating element that enables accidental exploration.

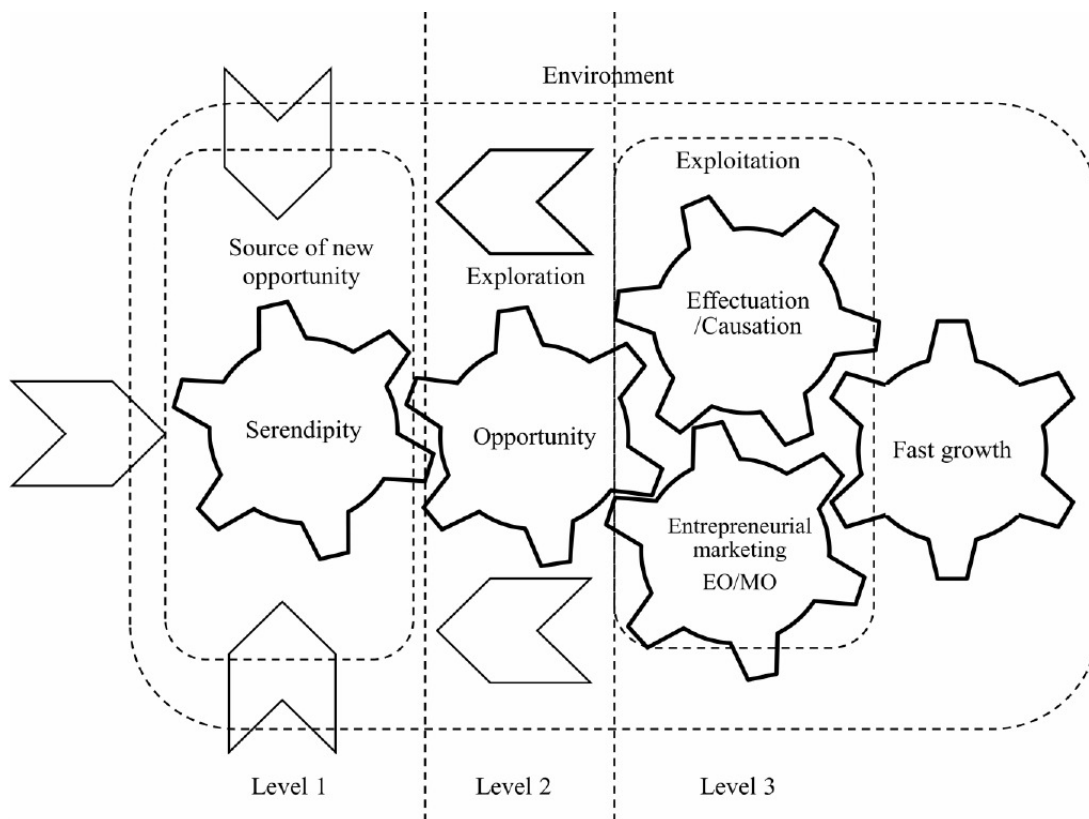


Figure 8.1. Fast growth model

Although a couple of the investigated firms are causative, some effectuation elements, such as relying on networks, were observed in these firms. This suggests that causation, in combination with entrepreneurial marketing, is the main instrument for exploiting new opportunities in causative firms. This is shown in our final proposed model in Figure 8.1.

In Figure 8.2, we used images to show the relationships between the constructs in this model. Elements such as networks, perseverance, and luck could be sources of opportunity as well as elements of effectuation and EM. Indeed, serendipity and the two other constructs share similar elements that can play a role in serendipitous opportunity exploration. Growth of the firms also can bring credibility and enhance firm reputation. This can be another source of opportunity exploration. Therefore, this model is not linear and the relationships are multilateral.

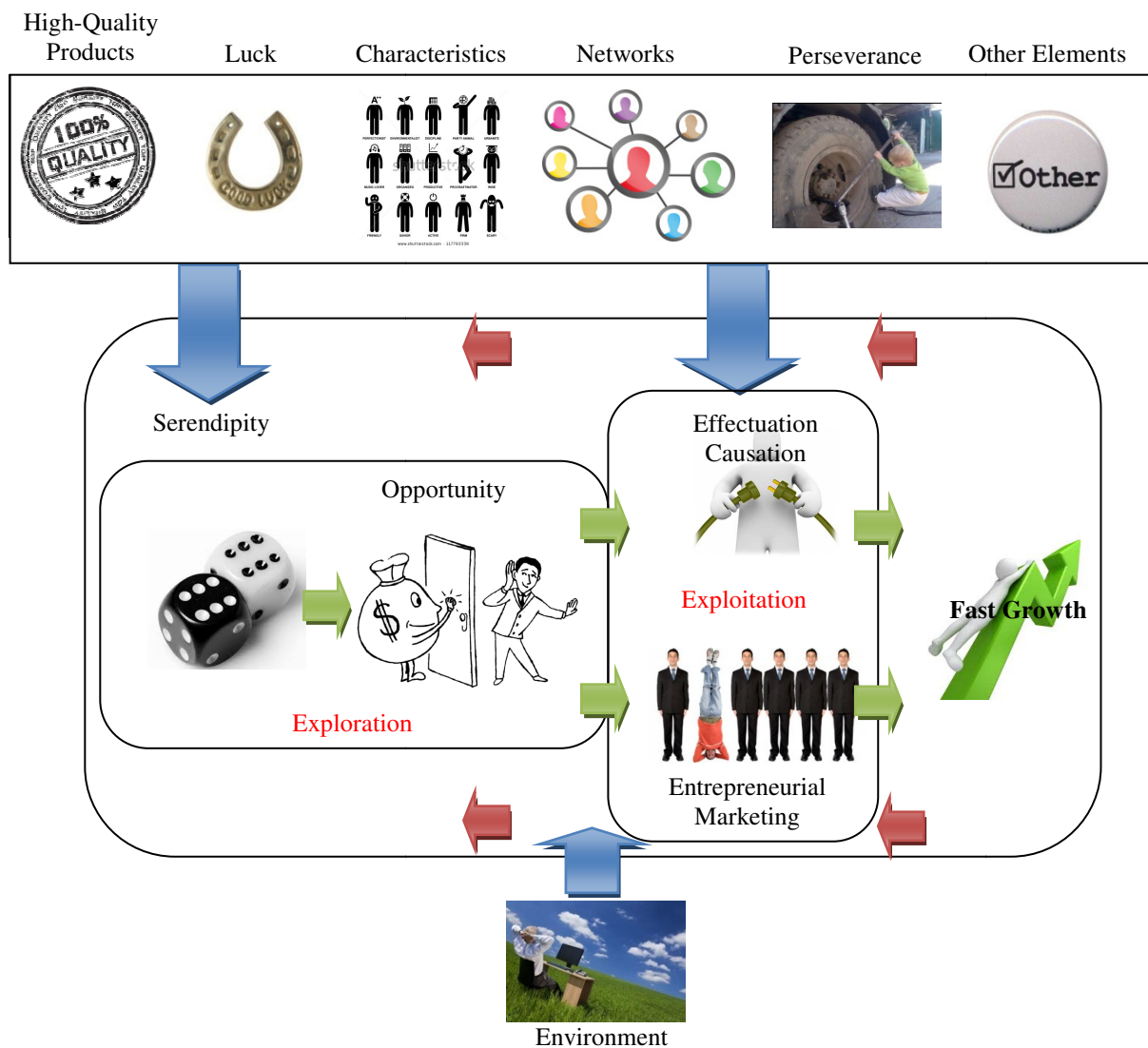


Figure 8.2. Graphic illustration of fast growth model

8.3 Cluster Analysis

Cluster analysis using Decision Explorer[®] software puts all related items into a cluster view and helps the researcher to put non-relevant nodes aside, giving a clearer picture of the selected items or nodes. In this research, marketing and effectuation nodes are coloured orange and blue, respectively. Serendipity and new serendipitous opportunities are coloured green and purple, respectively. Other important nodes, like networks, are in red and causation logic in light blue. Normal nodes without any special meaning are coloured grey. This colour scheme helped to differentiate the nodes of different concepts. Running the cluster analysis then helped to reveal the existing relationships between the nodes.

To verify the conceptual model, five cases from New Zealand and five from Iran that best fit the proposed framework were selected. Most of the cases supported our suggested framework. The following section discusses how the cluster maps of the selected firms provide evidence supporting the conceptual framework.

8.3.1 New Zealand Cases:

COP: COP is a company in the professional, scientific, and technical services sector. Cluster analysis of this firm shows that serendipity occurred at the first level, when the entrepreneur was in a team in his former job where he learned about the operational side of a production line. This position led him to an offer to work on his own and establish his business. He brought his former clients into his new company (networks). The first clients led him to expand his business organically (effectuation logic) and marketing practices like his profit-based pricing strategy combined with some profitable projects led to growth. Although there were other

serendipities on the map, it confirms the proposed model that serendipity occurs at the first level, opportunity occurs at the second level, and effectuation and EM both occur at the third level.

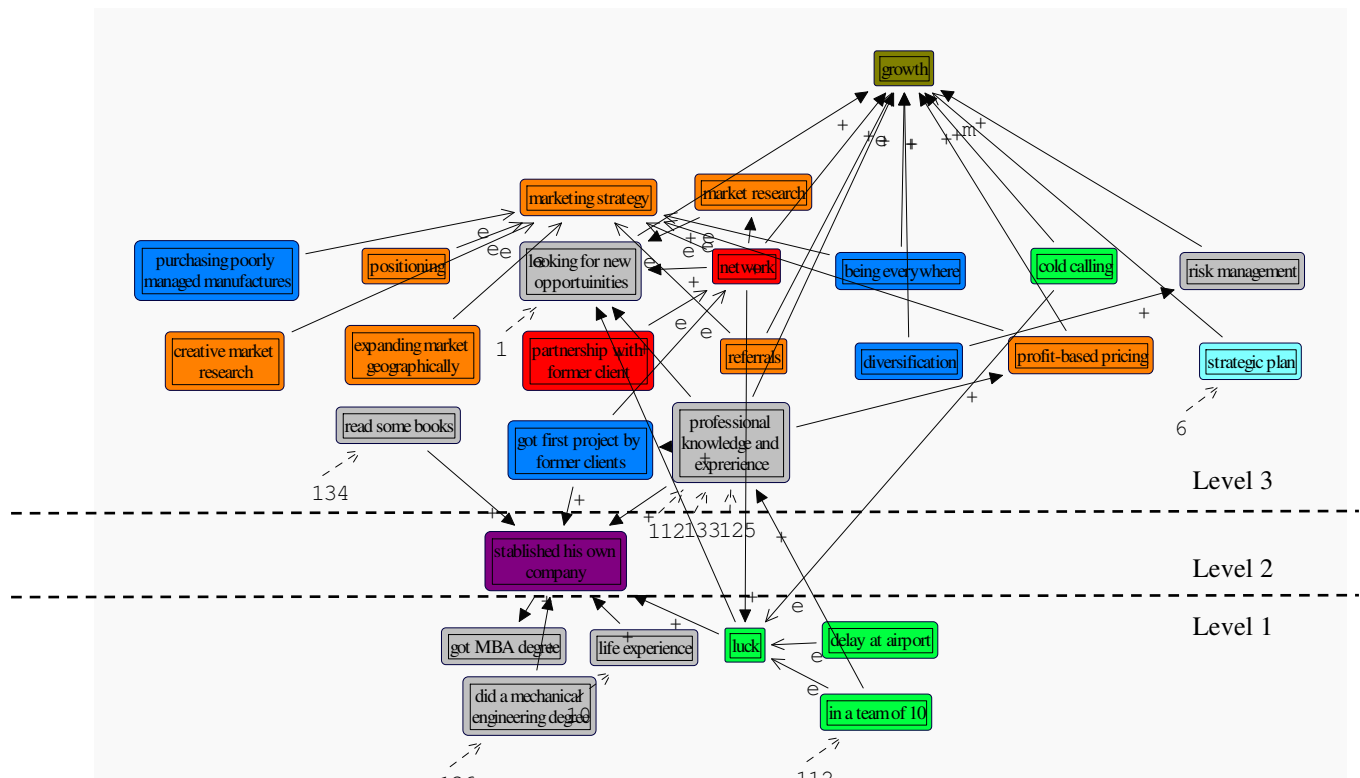


Figure 8.3. COP cluster analysis

ALE: ALE is active in the education and training sector. The entrepreneur was looking to run his own business and by chance, he met a friend of friend who suggested a profitable business to him (networks-serendipity). Another opportunity came to the company when the economic recession put the major investor in trouble (serendipity), so the entrepreneur changed his business plan and expanded the company. Pricing strategy, high quality of services and relying on word of mouth were top strategies this firm used to grow in the market place. The

existence of serendipity at level one, opportunity at level two, and effectuation and EM elements at level three of this firm's cluster analysis confirms the proposed conceptual model.

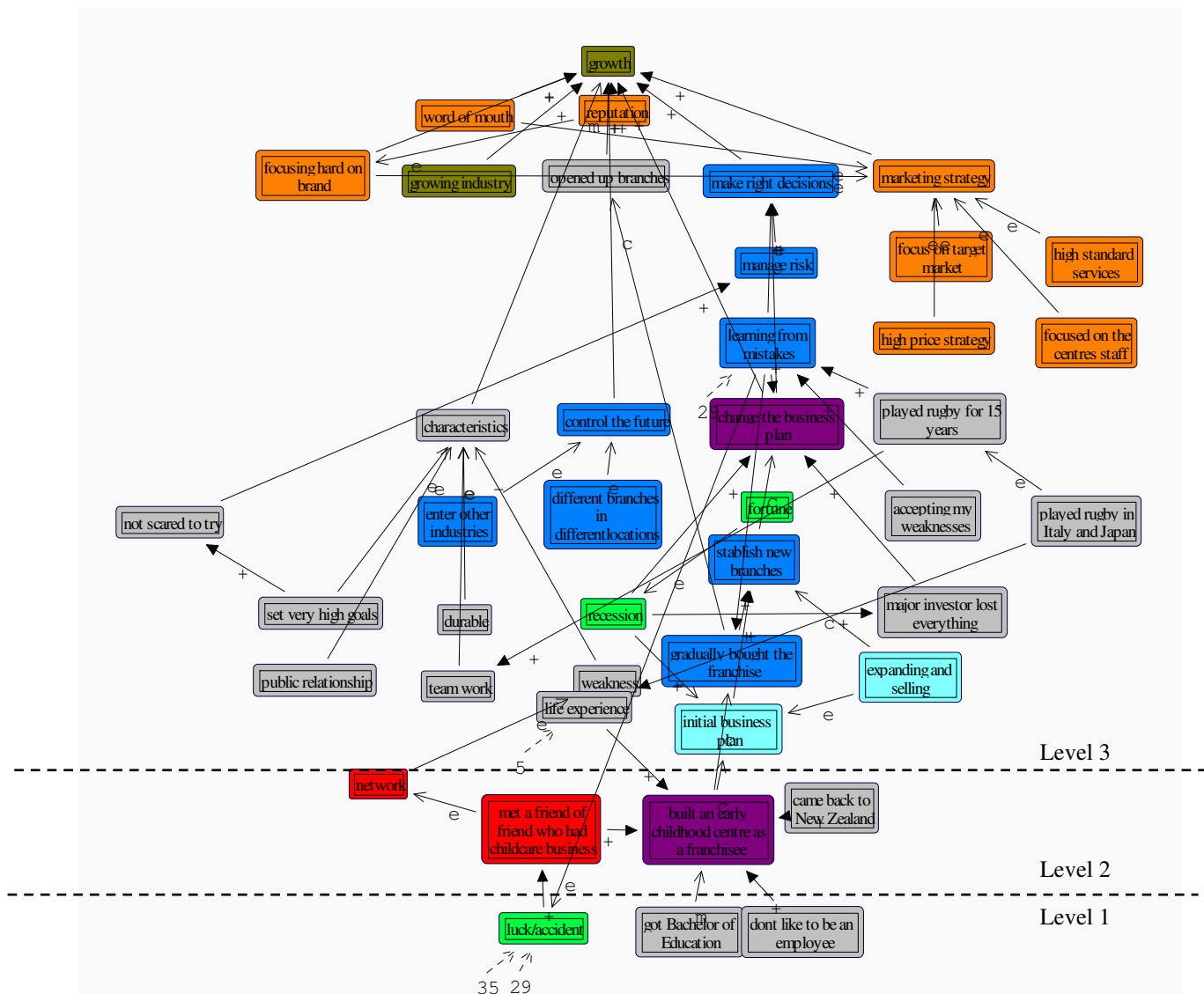


Figure 8.4. ALE cluster analysis

AIY: This firm operates in the rental, hiring, and real estate services sector. This firm has experience serendipity in early growth stage. The entrepreneur met a friend (network-serendipity) and got some ideas to change his business model. He also found a new partner because of his firms' credibility and differentiation in the market (serendipity). The entrepreneur borrowed money from his mother-in-law and started the business (effectuation). The firms' high-quality services, great support of customers and different model of business are some examples of EM. Cluster mapping shows that these serendipities occurred at level 1 and EM and effectuation elements are seen in levels 2 and 3 where the entrepreneur exploited new opportunities through his available means.

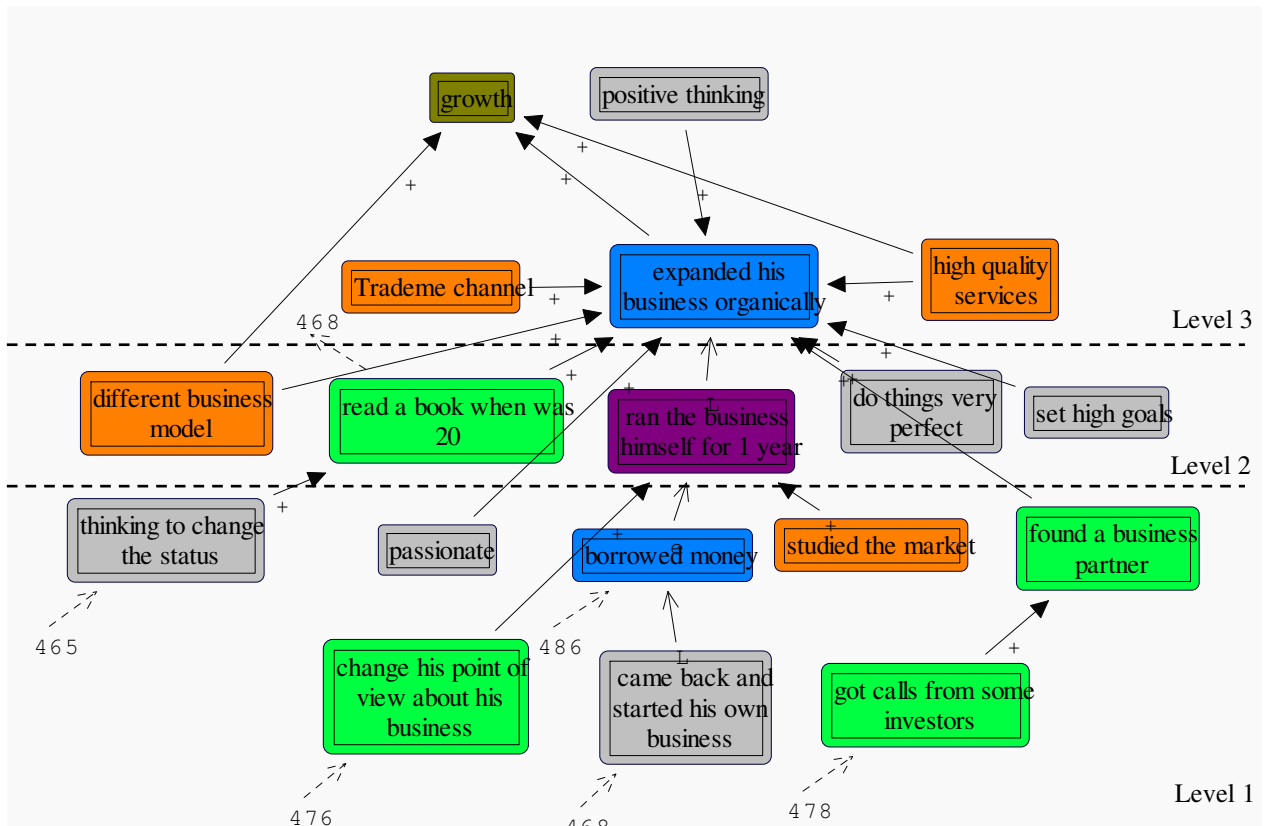


Figure 8.5. AIY cluster analysis

ASM: ASM is another company in the professional, scientific, and technical services sector. The cluster map of this firm also confirms the proposed model. Serendipity occurred at level 1, when the Rugby World Cup opened up a new opportunity and by a chance encounter, the founder met an executive and signed a contract to do Experiential Marketing projects for big brands in the World Cup. Other elements of growth occurred at higher levels. His first contract, which was through his ex-employer, is an example of effectuation (network). Word of mouth, networking, and social media were some strategies used by this firm (EM). Although there were some other serendipitous opportunities in higher levels, the map demonstrates that serendipity leads to new opportunity, and the entrepreneur's ability to exploit that opportunity makes the opportunity a source of fast growth.

Figure 8.6. ASM cluster analysis

CET: CET is a wholesale trader and manufacturer of energy efficient lighting. One of the significant serendipities for this firm occurred when the entrepreneur developed a friend's offer to run the current business (serendipity, effectuation). This led him to a new opportunity and allowed him to use his previous experience in the industry. Cluster mapping of the firm shows that serendipity occurred at level 1 and the new opportunity at level 2, with EM and effectuation mainly occurring at higher levels. Networking and direct marketing were widely used strategies for this firm (EM).

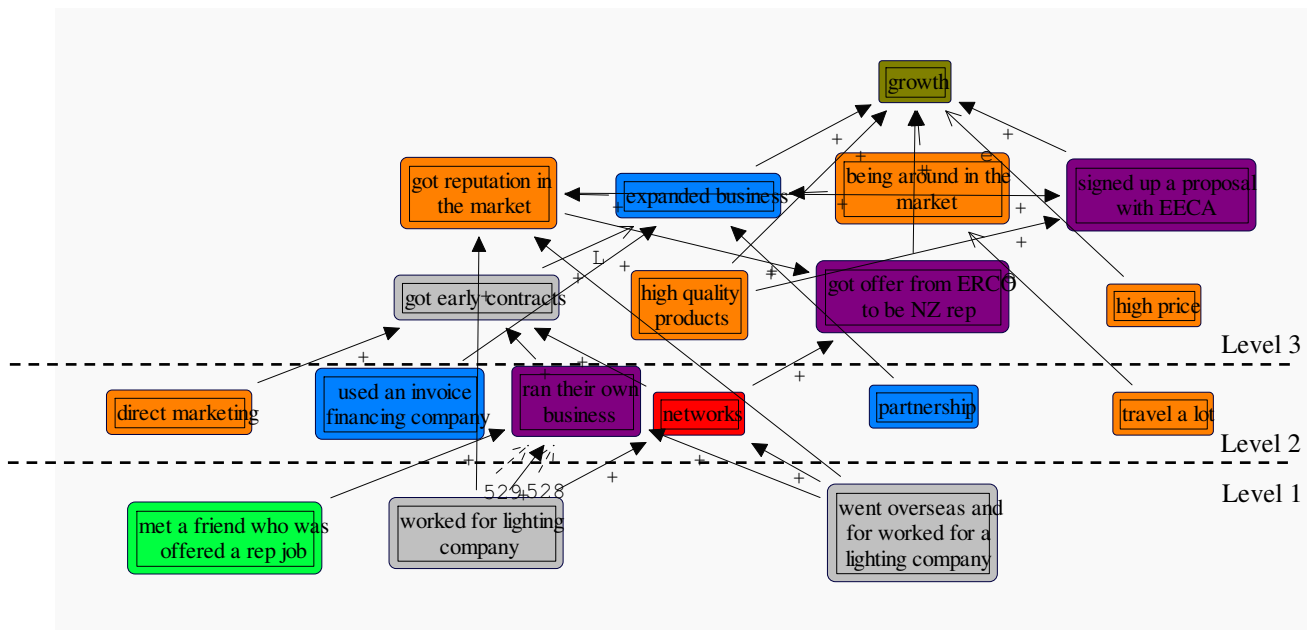


Figure 8.7. CET cluster analysis

8.3.2 Iranian Cases:

TAL: TAL is an advertising agency with a full range of services. In 2004, while the entrepreneur was working in the petrochemical industry with an aspiration of establishing his own company, he received an offer to sell his friend's handmade wall clocks. This serendipitous opportunity led him to start his own business in 2006, and after a few years, he effectually expanded his business. He rented a room in a friend's office and bought only a phone to do the business (effectuation). His innovative marketing practices (e.g. sales season, festivals, end-of-season sales, in particular, calendar sales, and customer loyalty programs) were strategies to gain customers (EM). The entrepreneur claimed that his firm's innovative marketing practices were unprecedented in the industry. Cluster mapping of TAL shows that serendipitous opportunities fall in level 1 and level 2 of the map and effectuation and EM elements fall in level 3.

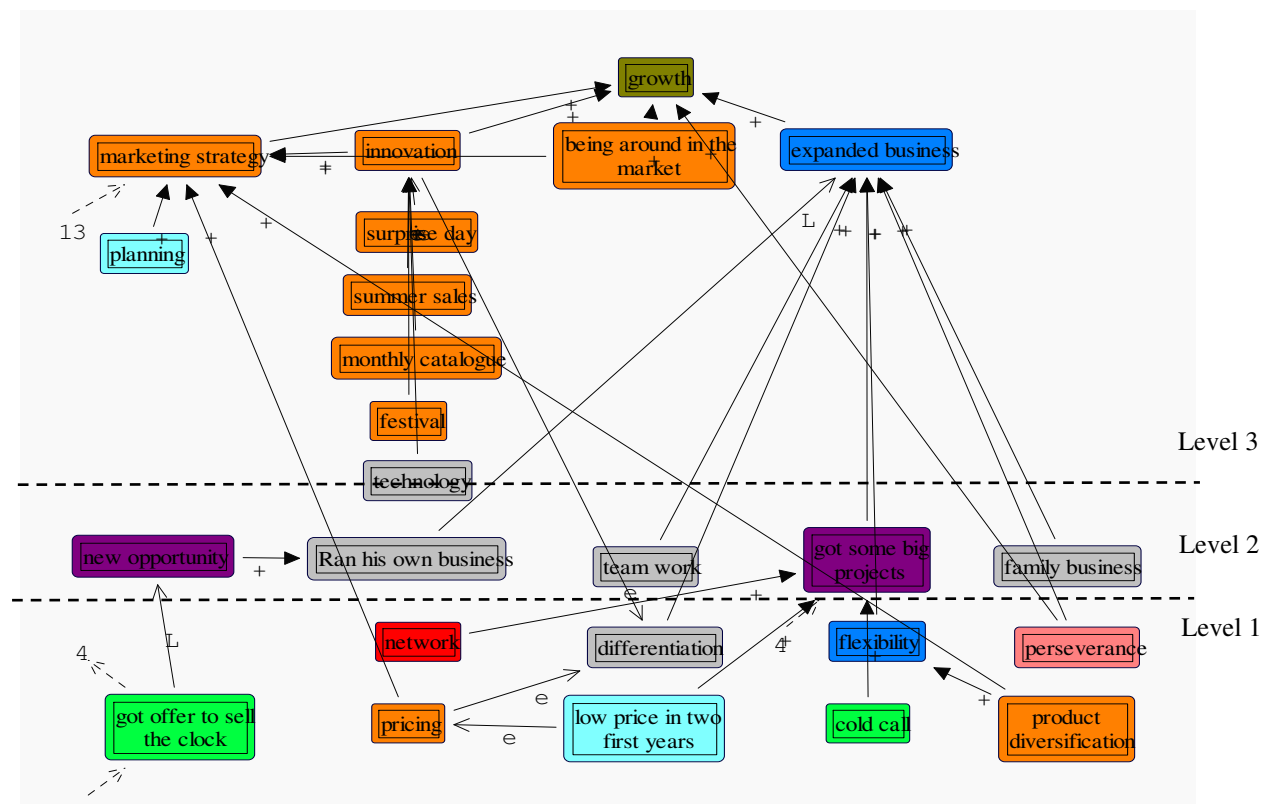


Figure 8.8. TAL cluster analysis

TAZ: TAZ is one of the construction sector companies investigated in this research.

Again, this firm's cluster analysis confirms the validity of the proposed model. The entrepreneur was offered (serendipity) by his former employer to start a business as contractor for the former company. Later, he got another offer to rent an asphalt manufacturer because he had been working in the industry for years. The opportunity to start his own business came along as he relied broadly on his networks and innovative ways of producing asphalt (effectuation and EM).

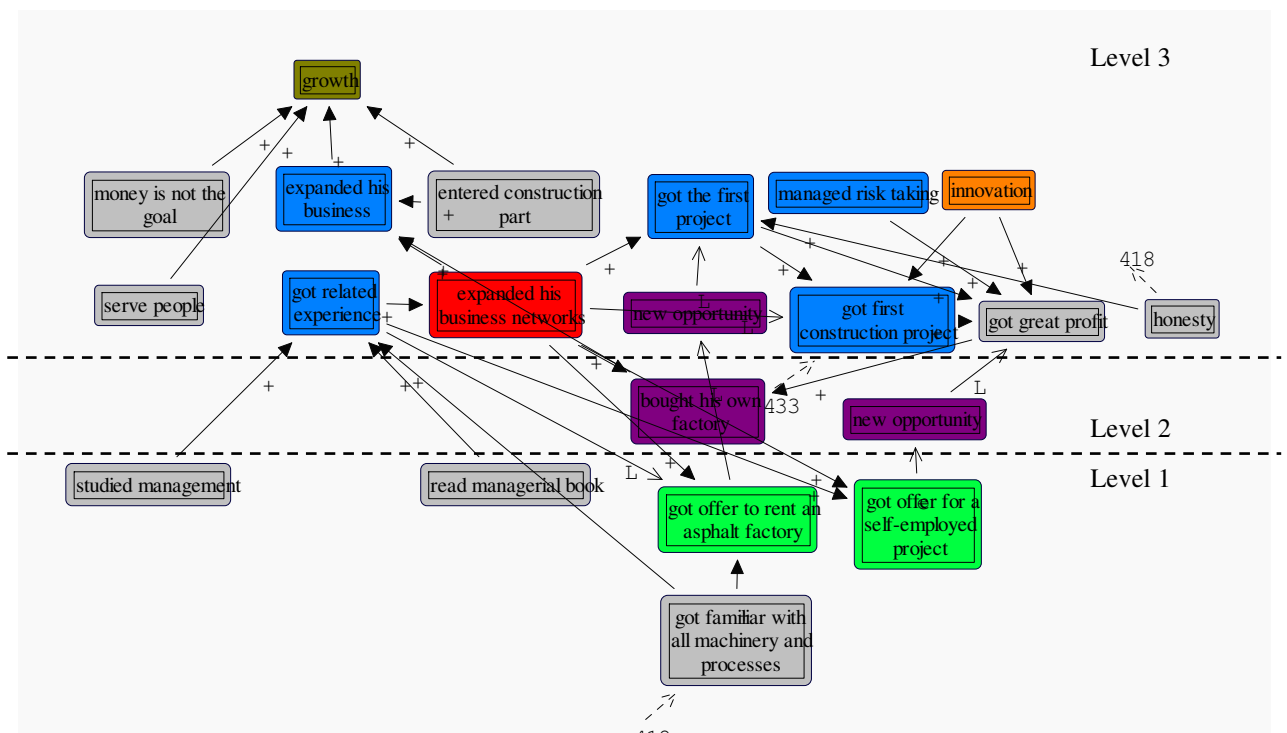


Figure 8.10. TAZ cluster analysis

TBE: This firm operates in the food industry, producing confectionary cream. Cluster analysis showed that serendipitous opportunities, combined with effectuation logic and entrepreneurial marketing, shaped this firm's trajectory of fast growth. When the entrepreneur set up the manufacturing facilities, he could not meet the high-quality standards he chose as a strategy. Through his networks, he found the only person in Iran who was able to give him advice on producing high-quality products (serendipity, effectuation). After a period of time, the firm's main competitor faced a production problem and was unable to produce (serendipity). TBE took the opportunity to increase its sales. Networks, high-price strategies, and high-quality strategies were practices used in this firm.

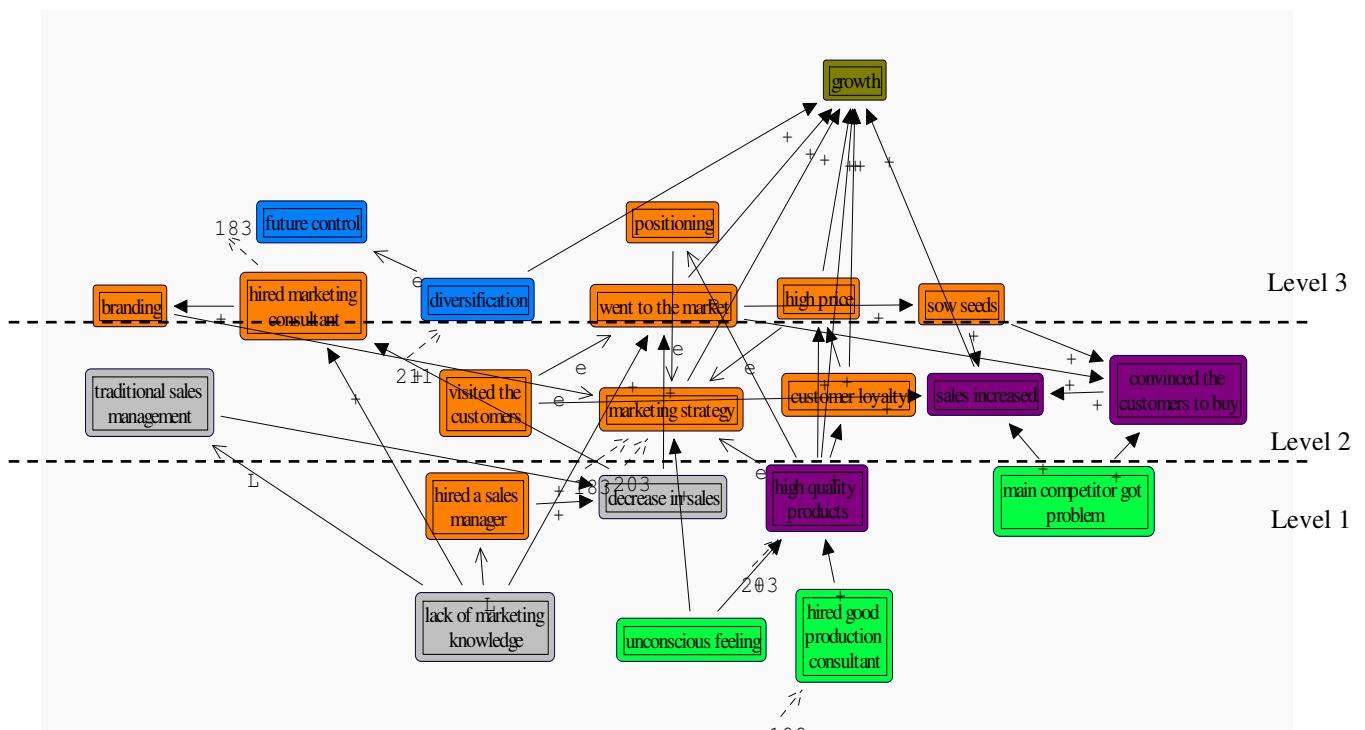


Figure 8.11. TBE cluster analysis

THO: THO is a wholesale trader in Iran. The entrepreneur found the idea for his business serendipitously while doing a marketing course (distribution section). He believes that his business is unique in Tehran. He expanded his market in a serendipitous manner when his clients asked him to provide some new products for them, and this request gave him insight into a new market. Cluster analysis of THO confirms the proposed model. Although serendipity is significant in this firm, the entrepreneur's ability to exploit serendipitous opportunities was outstanding. Networks and the credibility to access resources were crucial for this firm (effectuation). High-price and high-quality services are the main EM practices in this firm.

Figure 8.12. THO cluster analysis

8.4 Conclusion

This study has established that serendipitous opportunity and EM combined with effectuation elements shape the trajectory of fast growth. The level at which EM and effectuation nodes occurred in most of the firms was similar. In most firms, serendipity occurred at the first level. In a few maps, serendipity occurred at the same level as EM and effectuation, however, as was reported in earlier chapters, there were other factors that helped firms to leverage serendipity to get more benefits.

Overall, although serendipity and serendipitous opportunities occurred at lower levels compared to effectuation and EM, there was no significant direct relationship between serendipity and growth. However, effectuation and EM were directly and indirectly related to fast growth. These results confirm our last proposition:

Fast-growth firms explore opportunity through serendipity and exploit it through effectuation using EM strategies.

New Zealand and Iranian firms show similar patterns in terms of serendipity occurrence and their entrepreneurial ability to exploit serendipitous opportunities. This confirms that, despite cultural differences in their views of the source of serendipity, the pathways to growth are similar. In both environments, serendipity leads to new opportunities and those opportunities are exploited using a mix of effectuation and EM. Thus, one can say that, the nature of doing business in the two environments is practically the same. The differences are merely in the value systems and the worldviews of the entrepreneurs.

Chapter Nine: Conclusion and Discussion

9.1 Introduction

This research has demonstrated the role of serendipity, effectuation logic, and entrepreneurial marketing in fast-growth firms. Serendipity is shown as a precursor to new opportunities that could be explored by an entrepreneur through experience, alertness, and ability, while effectuation logic and EM together are considered a powerful tool for exploiting new opportunities. This research investigated the role of each element in different chapters by mapping out the stories of fast-growth for firms in New Zealand and Iran. The results suggest that serendipity exists in most of the firms' day-to-day business activities and can be a great source of new opportunities. However, serendipity is not enough to achieve growth and there are two important mediators: effectuation and EM. Entrepreneurial marketing, combined with elements of effectuation reasoning, which enable entrepreneurs to be more innovative and opportunistic in the marketplace, has the strongest influence on fast growth.

This final chapter synthesises the contribution of the research to our understanding of the relationship between serendipity, effectuation logic and EM in two distinct phases of exploration and exploitation of new opportunities. The chapter begins with a summary of the theoretical background and the research questions of the thesis, discussing the contribution of this study to theory and practice. The findings of each chapter of the thesis are then presented. Finally, the implications of the study for entrepreneurs and scholars and the areas for further research are discussed.

9.2 Theoretical Framework and Findings

Fast growth still puzzles scholars (Lopez-Garcia & Puente, 2012). Many studies have been conducted to find how and why firms experience fast growth, leading to the development of frameworks. Some scholars believe that fast growth is a combination of firm resources and managerial compatibility (e.g. Barringer et al., 2005; Littunen & Niittykangas, 2010; Penrose, 1960; Y. Zhang et al., 2008), while others believe that fast growth is just an accident and play of chance (e.g. Coad et al., 2012; Wagner, 1992). Moreover, there is evidence that environmental changes lead entrepreneurs to explore new opportunities and some entrepreneurs and companies find new opportunities through pure chance or luck (Ennis, 1999; Wagner, 1992).

Exploring new opportunities could be analogised to the discovery of new things in science. Accidental discovery of a phenomenon is an accepted pattern in science and reviewing the history of scientific discoveries shows that many of these discoveries have happened by accident and being lucky (Merton & Barber, 2004; Roberts, 1989). Scholars construe that although these discoveries are accidental, there is an elegant difference here; it is not luck – it is serendipity. The difference between serendipity and other types of discoveries is the ability and wisdom of a scientist to observe unusual things and use it to find something that may be intended or unintended (Friedel, 2001). If we postulate that firms are human artefacts (Sarasvathy, 2003) and opportunities are similar to scientific discoveries, then they can be built and explored in a serendipitous manner.

Effectuation logic integrated with EM (Hills & Hultman, 2011a) can be a powerful instrument to assist entrepreneurs in exploiting opportunities at minimum costs. Since an entrepreneurial process in exploiting new opportunities is different from a traditional or large

firm's process (Sarasvathy, 2001), effectual decision-making better explains entrepreneurs' behaviour in entrepreneurial and small firms (Sarasvathy, 2001, 2008). This unique decision-making process affects all aspects of entrepreneurial firm performance and marketing practices (Hills & Hultman, 2011a). To be more entrepreneurial, effective, and innovative firms have to implement an entrepreneurial marketing strategy being entrepreneurially oriented as well as market oriented (Morris et al., 2002; Morrish, 2008). Therefore, serendipity, effectuation, and EM constitute a unique contribution of elements that can help firms grow faster. We now revisit the main research questions and discuss them based on our findings:

RQ: How does serendipity, effectuation logic, and entrepreneurial marketing affect fast growth in entrepreneurial firms?

In order to address the main and general question, we developed four other sub-questions in two phases: exploration and exploitation. In the exploration phase, the question is:

RQ1: How does serendipity manifest in entrepreneurial opportunity exploration and how does it affect a firm's fast growth?

Chapter 5 covers the answers to this question. The results show that most of the investigated firms in this research experienced serendipity, mostly in their formation and early stages of their life-cycles, and explored new ideas, opportunities, products, or markets. We support and confirm the recent findings that discovering new opportunities is not a goal-oriented process (Ardishvili & Cardozo, 2000) and sometimes opportunities arise at the right time (Lam & Harker, 2013). Causal maps demonstrate that the main sources of serendipity are *networks, pure luck/chance, perseverance, environment, and high-quality products/services*. Furthermore, although serendipity cannot be ignored, it is not the main source of growth. It is likely to be a

trigger for fast growth and there are other moderating elements between growth and serendipity. Based on these findings, we extend Storey's (2011) OC theory. In OC theory, optimism and chance are an integral part of an entrepreneur's decision to continue the business and make money. We suggest that chance is important, but not enough to grow and maintain the business. Despite having optimism, entrepreneurs need special abilities to explore and exploit emerging serendipitous opportunities. Findings show that entrepreneurs do not believe in chance or luck and note that they are responsible for "creating" their own luck. In contrast, they see serendipity in combination with their ability as an integral part of their everyday businesses, particularly in firms with few resources.

A new pattern of serendipity is identified as well. This pattern simply implies seeking any type of opportunity to run a business and exploring an opportunity through a serendipitous event. This pattern appears to be common in entrepreneurship, which is different from three known patterns in science. Therefore, we expand on Friedel's (2001) proposed patterns and Dew's (2009) conceptual model (i.e. search, knowledge and contingency) showing that Entrepreneurial Serendipity exists in entrepreneurship and it occurs where explored opportunity is unspecified and entrepreneur's knowledge (about that opportunity) is high or low, and search could be either haphazard or orderly. The new pattern can also be observed in many fast-growth firms, especially at the initial stage of organising.

New Zealand and Iranian entrepreneurs are similar in terms of their business activities, but they are somehow different in viewing the source of serendipity. As some Iranian entrepreneurs are committed to their religious beliefs, they view serendipity as being endowed by a higher spiritual being.

Therefore, we confirm firstly: serendipity can be a precursor of new opportunities, and it has an influence on exploring new opportunities. Secondly, these opportunities can lead to fast growth if entrepreneurs can exploit them appropriately. To know this, we developed our second and third questions in the exploitation phase.

RQ2: How do entrepreneurs use effectual reasoning in relation to a firm's fast growth?

Analyses in chapter six reveal that a majority of the investigated fast-growth firms employ effectuation logic (Sarasvathy, 2001) to start and develop the business. Many of them started the business with no or few resources; and just naturally tried to use their characteristics, knowledge, experience, and networks to leverage contingencies (the bird-in-hand principle). They are very careful about taking risks and how much money they can afford to invest (the affordable loss principle). Most of them have partners to mitigate business and personal risk (the crazy quilt principle) and diversify their products and services and have the utmost commitment to their vision to control the future (pilot-in-the-plane principle); however a few of the firms use unrelated diversification as a an instrument to control unpredictable future. A closer look at what they have done demonstrates they largely apply effectuation reasoning except for two firms, which are more planning and strategy oriented due to their ability to require the necessary resources.

In addition, effectuate firms tend to become causative after a period of time (Maine et al., 2014; Read & Sarasvathy, 2005) and our findings support this contention; however, the shifting point is not very clear. More planning, more staff, and division of labour are some common elements of changing the paradigm to causation, but there are still visible elements of effectuation. Therefore, firms adopt both effectuation and causation depending on the resources

they have available. More resources lead to being more causative; however, two of the firms are still effectuated due to their market uniqueness.

In summary, fast-growth entrepreneurial firms predominantly employ effectuation logic to exploit new opportunities, but elements of effectuation are observed in other activities such as the way they conduct marketing practices (Hills & Hultman, 2011a). To understand the impact of such behaviour on the marketing activities of firms (Perry et al., 2011), we developed our third question.

RQ 3: How do entrepreneurs use entrepreneurial marketing in relation to a firm's fast growth?

We discussed entrepreneurial marketing concepts in our cases in Chapter 7. We found that marketing practices are the main sources of fast growth. These applied practices are different from traditional marketing and appear to be entrepreneurial. Our findings support and are in line with other findings in the field (Gilmore, 2011; Gilmore & Carson, 2007; Lam & Harker, 2013; Stokes, 2000a, 2000b). Entrepreneurs create their own style of practices due to their unique understanding of marketing (Stokes, 2000a, 2000b). Relying on networks, innovation, close connections with their clients, delivering the best quality, learning from mistakes, opportunism, and adapted practices are some elements of EM in investigated firms. Quality is crucial for them to position themselves in the market. High-price strategy (along with high quality) is used to convey value creation to customers. Indeed, they focus on more value for their customers than their competitors do. Brand strengthening by applying some innovative promotion and communication is another strategy of the firms. Wide use of social media, (especially in New Zealand) enables contact with customers and makes it easier to tell them about the company.

Entrepreneurs do not rely on traditional marketing research and prefer to expand their networks with peers and clients to gain required information from the market. In addition, constant presence in the market keeps entrepreneurs up to date about market changes.

Limited resources drive entrepreneurs to focus on efficient and innovative use of their available resources, which explains the adoption of EM and effectuation. They utilise available means in combination with other elements of effectuation (i.e. networks, partnerships, calculated risk) to create their own marketing activities. This is where we suggest that fast-growth firms use effectuation logic with EM strategy to exploit opportunities.

Finally, we looked at the relationship among the three concepts of the study in the question below:

RQ4: What are the interrelationships between serendipity, effectuation, and EM in fast-growth firms?

We examined this relationship in Chapter 8. Cluster analysis and causal maps depict that serendipity generally occurs at the beginning of growth. In other words, growth or fast-growth firm is a chain of events that starts with serendipity. The interrelationship between effectuation and EM that normally takes place at the same level of the growth process, tells us that they are intertwined and it is difficult to separate them. In conclusion, we confirm our last proposition that fast-growth firms explore an opportunity through serendipity and exploit it through effectuation using EM strategies. We accordingly improve our model and show that these relationships are not one-way, and all elements influence other constructs of the model, thus relationships are multilateral.

9.3 Discussion and Contribution

This study aimed to understand and explain why some firms grow faster than others. Literature in this area mostly focuses on finding tangible aspects of growth although there is some evidence that firms grow by accident. After developing a framework consisting of serendipity as a source of new opportunities in the exploration phase and effectuation logic and EM as exploitation strategy, we used a qualitative and case study approach to better understand the phenomenon. Twenty entrepreneurs from fast-growth firms in New Zealand and Iran were given a voice. They talked freely about the history of their companies and the history of their growth. Causal mapping was employed to give us a broader and deeper understanding of the growth trajectory.

The research contributes to literature and practice in five different areas. Firstly, the main contribution is in the role of serendipity in exploring new opportunities and growth of firms. This study investigates this influence, and confirms that serendipity plays an indirect role in every business we investigated. In light of OC theory (Storey, 2011) we suggest that chance should be exploited; otherwise, it has no effect on growth. Entrepreneurs need to be alert to their environment, then use their means to exploit any emerging opportunity. This finding expands the literature, but certainly warrants future investigation using more qualitative and quantitative data. In addition to the known patterns of scientific serendipity, we introduce Entrepreneurial Serendipity, which adds to the extant literature and understanding of serendipity in entrepreneurial firms. This outcome expands our understanding about how serendipity happens and how entrepreneurs can expose themselves to serendipity with respect to the three building blocks of serendipity in Dew's (2009) framework.

Secondly, employing causal maps expands our knowledge about the chain of events that occurs at the early stage of the firms' life cycles that lead to achieving growth. This method can be a useful tool to unlock some black boxes in the process of decision-making (Woodside, 2005) and disseminate the knowledge of entrepreneurs to scholars. We recommend experienced and novice scholars employ this method, especially in qualitative studies to probe further and investigate more such cases. One node (concept/events) in a causal map would potentially have a strong effect on a big process (i.e. growth or decision-making) that may not be explored in other research methods; but using causal maps enables scholars to find, for example, turning points in a firm or an individual. This method can also be a useful tool for researchers looking for the source of new ideas in marketing and management. In addition, in this study we employed the mathematical aspect of the causal maps (i.e. central and domain concepts) which is quite a new approach.

Thirdly, we chose a process-oriented approach (Wright & Stigliani, 2013) to focus on why and how firms grow fast, rather than focusing on numbers. This assisted us in exploring hidden layers of fast growth by looking at the chain of events visually, allowing us to find milestones on the map and the reasons behind a phenomenon. In this research, we expanded the use of causal maps and the methodology that was already used in a few research studies in marketing, management, and entrepreneurship (e.g. Ennis, 1999; Woodside, 2005).

At the fourth level, in using causal maps we were able to plot how effectuation and EM interact. This shows that organisational activities are not linear and many elements interact with each other and form a process. Thus, this type of research potentially expands our understanding

about organisational phenomena making things visual to assist scholars with making better sense of what they are looking for.

Finally, the method we used in parallel with the elements we investigated supports our findings on fast growth. We present our proposed model as a pathway of fast growth that expands the current literature about fast-growth entrepreneurial firms. The combination of the three concepts of serendipity, effectuation, and EM is a new perspective of investigating fast growth. Hence, the research expands the literature of fast growth and encourages scholars to acknowledge the effect of non-tangible elements such as chance or luck, and also expands the contribution of EM and effectuation in fast-growth firms.

9.4 Implications of Research

At a practical level, these findings help entrepreneurs to understand elements involved in fast growth. The role of serendipity and its sources offer some guidelines showing how entrepreneurs are able to expose themselves to serendipity. The role of networks is crucial in doing business, and entrepreneurs should be aware of expanding their personal and business networks. Being engaged in friendly, professional, and academic networks may help them to find new opportunities. Perseverance is another recommendation for entrepreneurs encouraging them not to give up with vicissitudes in their business. We found that most of the entrepreneurs had benefited from their persistence and this gives them new opportunities. Being alert to changes in the environment and commitments to clients in terms of high-quality products and services are other elements that may open new windows of opportunity.

Entrepreneurs that do not have sufficient resources may use effectuation reasoning, especially in the early stages, and combining this logic with entrepreneurial marketing practices

would result in innovative ways of doing marketing. As the study suggests, EM strongly influences growth, so thinking in different and creative ways rather than traditionally can pave a pathway for growth.

Theoretically, the study further develops the entrepreneurship and marketing literature. The mix of traditional marketing, EM, and effectuation, as well as understanding the role of unpredicted events in business, would help both scholars and entrepreneurs to understand these phenomena. While we are pleased to offer new perspectives, we also acknowledge that this is only a start and further investigation could greatly enhance wider understanding of serendipity at the interface of marketing and entrepreneurship.

9.5 Limitations

The main limitation of this study was the process of identifying entrepreneurs who were willing to participate in our study. Most of our participants are usually very busy so it was difficult for them to find time to be interviewed. We conducted some of our interviews after hours to avoid inconveniencing entrepreneurs during their working hours. Additionally the information given during our interviews was based on participant recollection and self-reporting. Thus, there might be other information or evidence that we have missed as a result.

The other difficulty was finding fast-growth firms in Iran that matched our pre-defined index of fast growth (Deloitte Fast 50). We found them through our networks and relying on individual assessment and selection as opposed to an established ranking.

9.6 Future Research

As comprehensively discussed, fast growth still needs more research. This research had several limitations that offer new opportunities for research. Four areas touched upon in this

thesis should be researched in more depth. For example, further research can be undertaken to compare successful firms (i.e. fast growth or grown firms) with unsuccessful firms to determine how owners and entrepreneurs were exposed to serendipity, and to what extent they were able to realise and exploit opportunities. This comparative study would enhance our interpretation of the role of serendipity in two types of firms and show if they have the same level of serendipity or not.

There is also opportunity for scholars to investigate grown firms in the same industry. This could help researchers to understand similarities of serendipity occurrence, effectuation, and EM thinking as they manifest in similar situation. It would be valuable for scholars to compare industries using more cases to improve generalisability of the findings for different settings.

More quantitative research is also required to create tangible measures for serendipity. This will be an opportunity for scholars to expand this perspective in entrepreneurship research. Numbers would assist in representing the concepts and helping scholars to develop serendipity literature from there.

Finally, the interrelationship between effectuation and EM could be examined by investigating the overlaps in terms of decision-making and action. Qualitative and quantitative studies that broaden the interaction of these two concepts can help entrepreneurs and scholars in understanding the effect of “effectuative marketing” that captures the notion of entrepreneurship, marketing, and effectuation. This is an attractive research area to pursue that will no doubt sit nicely at the interface of entrepreneurship, marketing, and management.

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Appendix1: Causal Maps of the Investigated Firms

Professional, Scientific, and Technical Services:

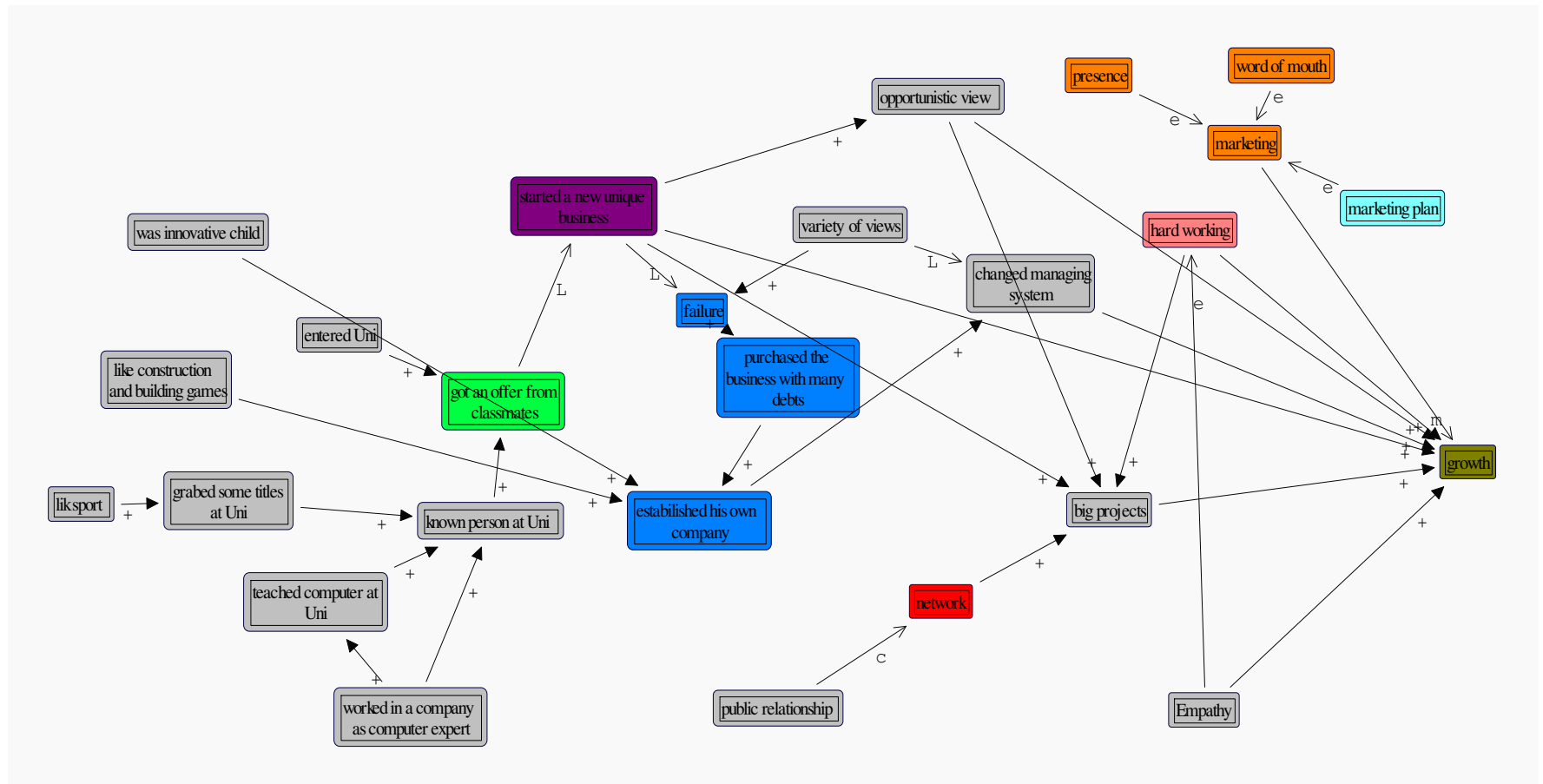


Figure-APX 1. TME causal map

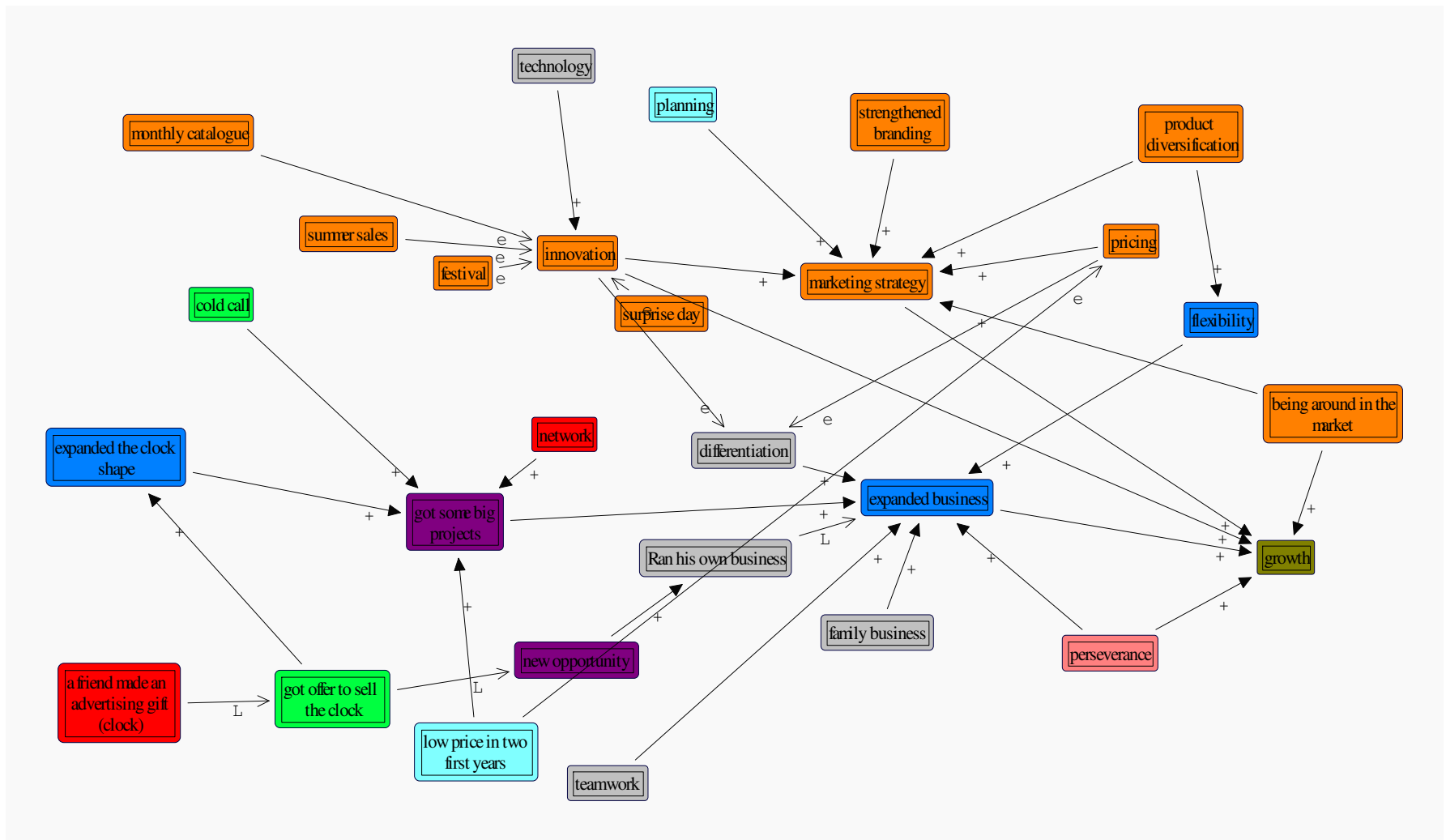


Figure-APX 3. TAL causal map

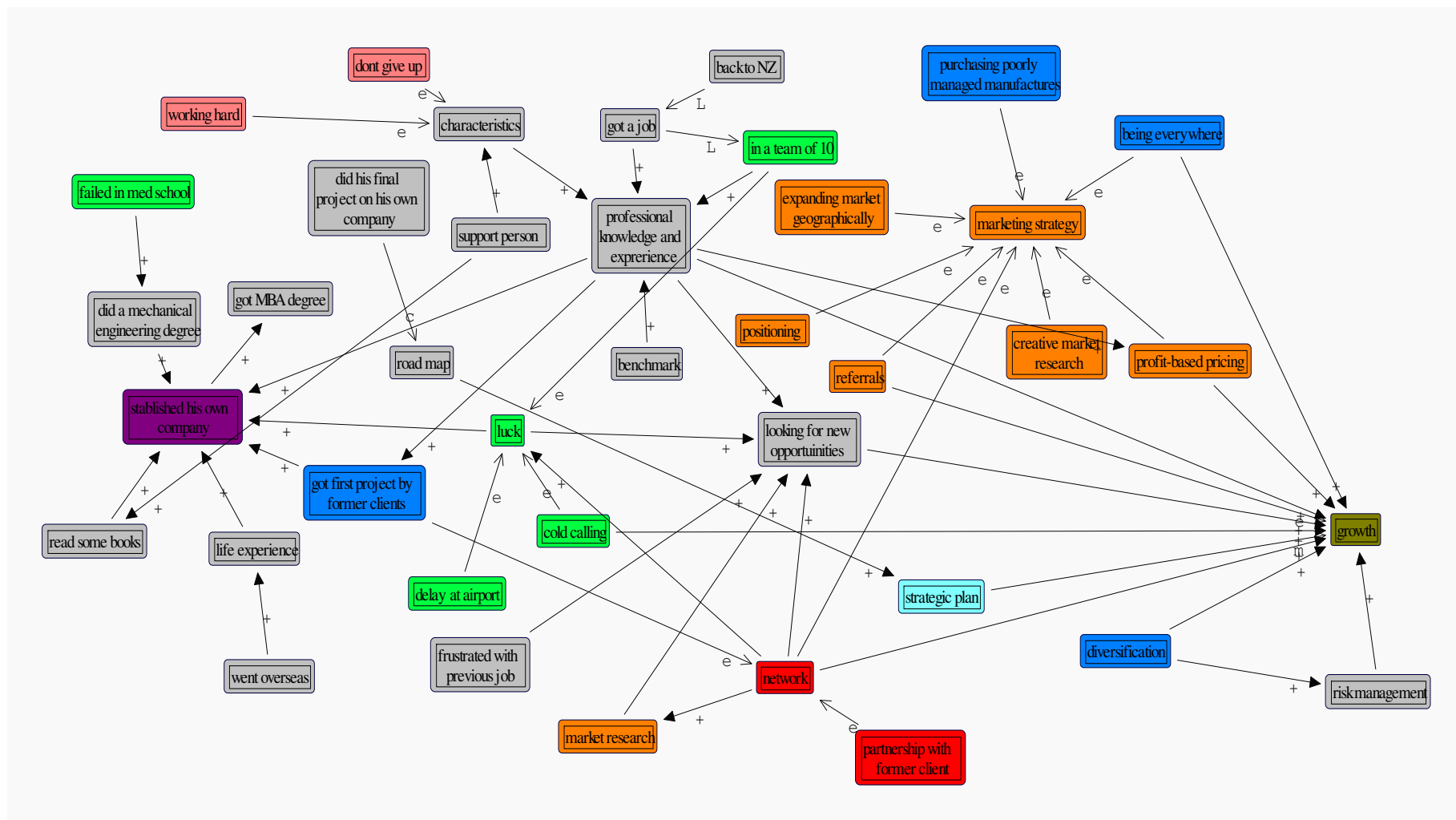


Figure-APX 4. COP causal map

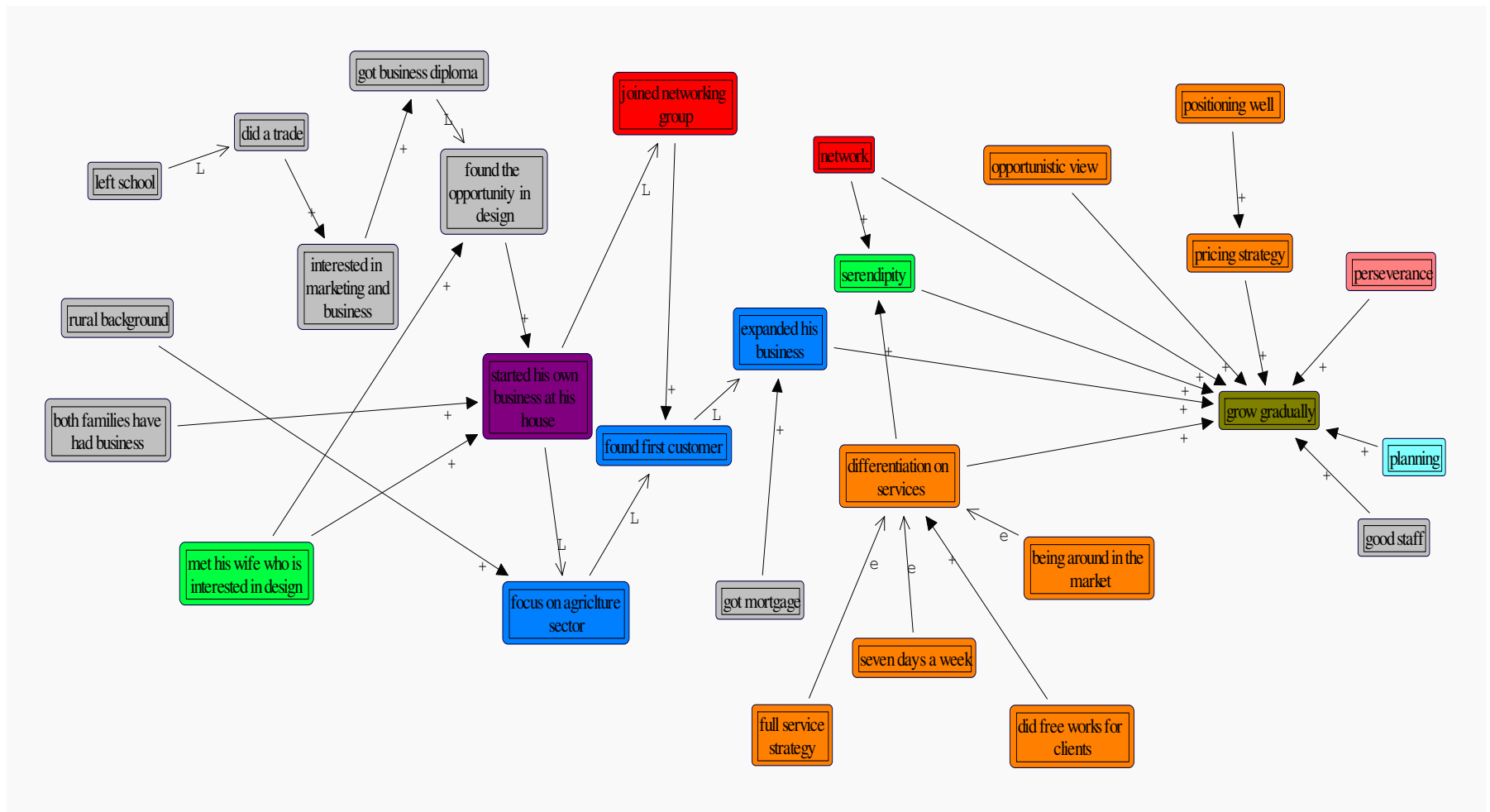


Figure-APX 5. CPN causal map

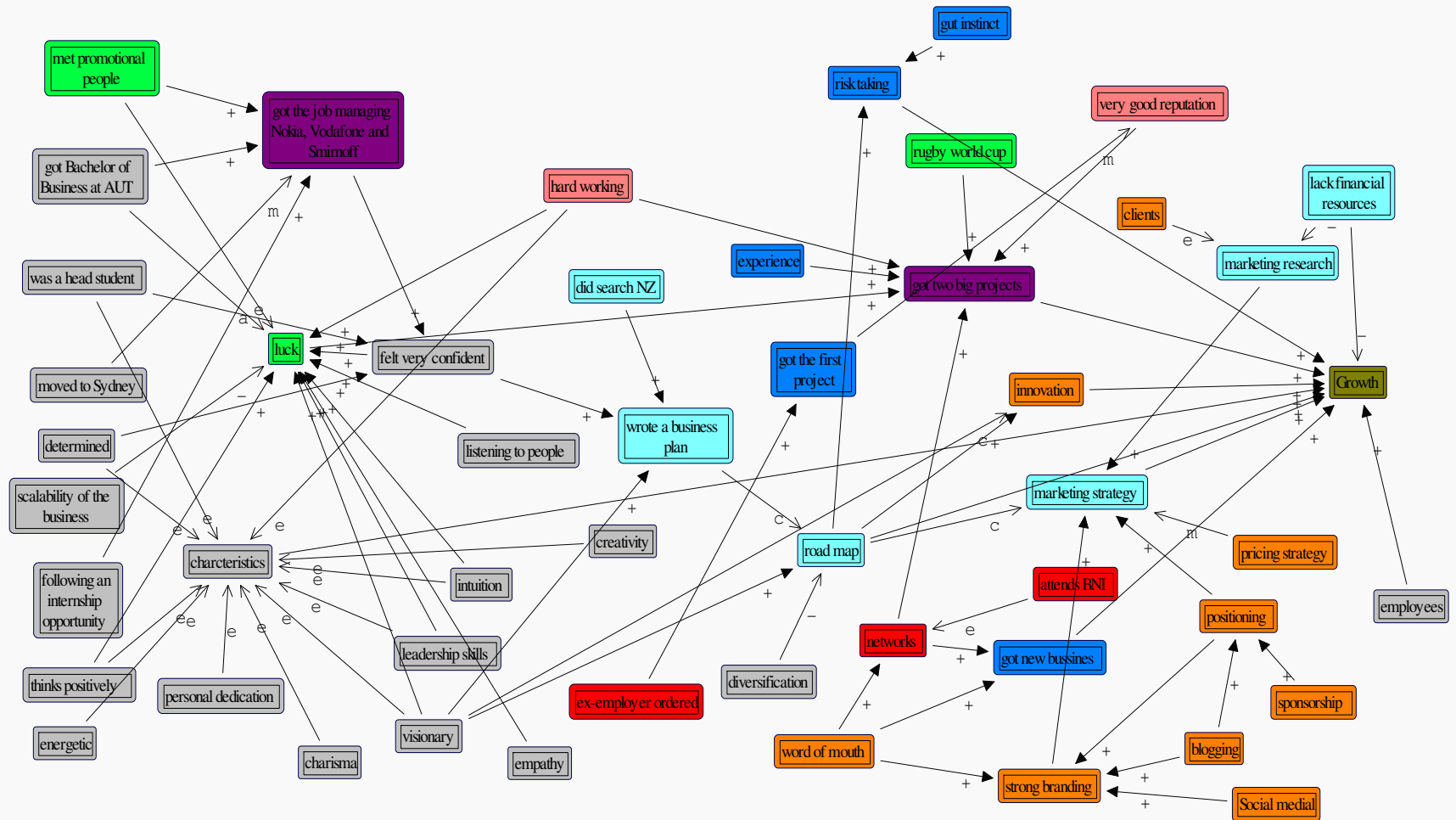


Figure-APX 6. ASM causal map

Food industry:

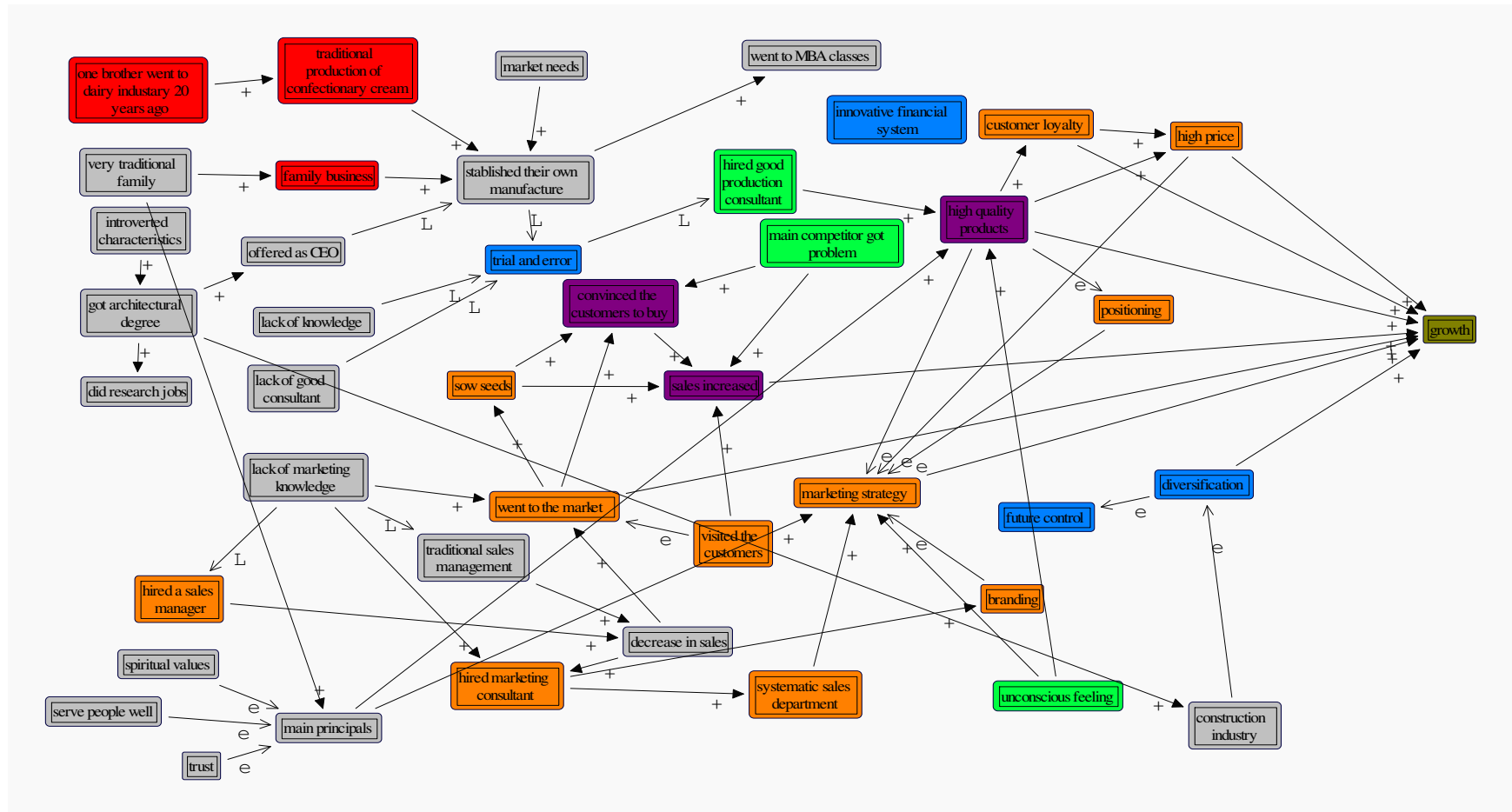


Figure-APX 7. TBE causal map

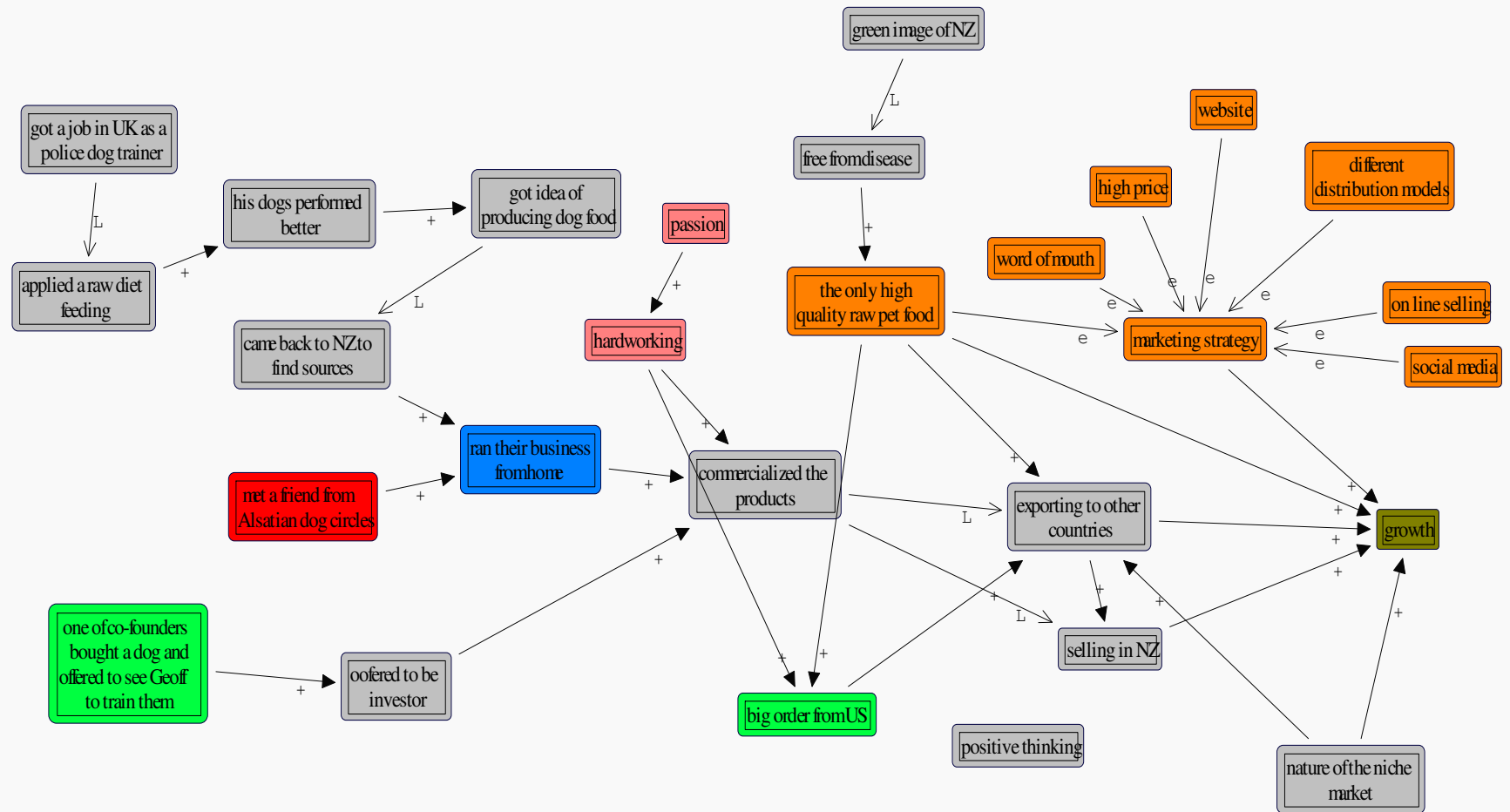


Figure-APX 8. CKE causal map

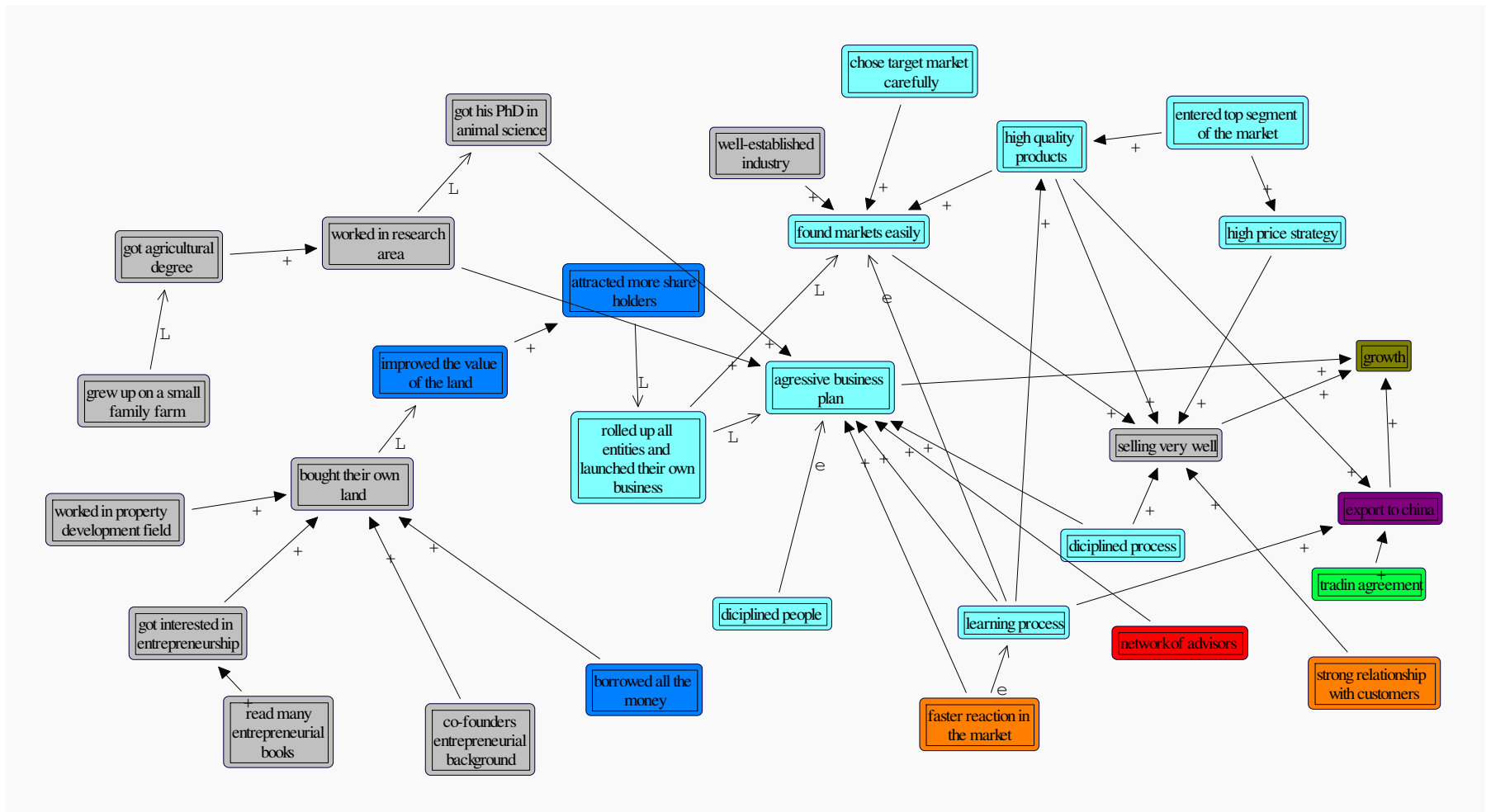


Figure-APX 9. CST causal map

Construction:

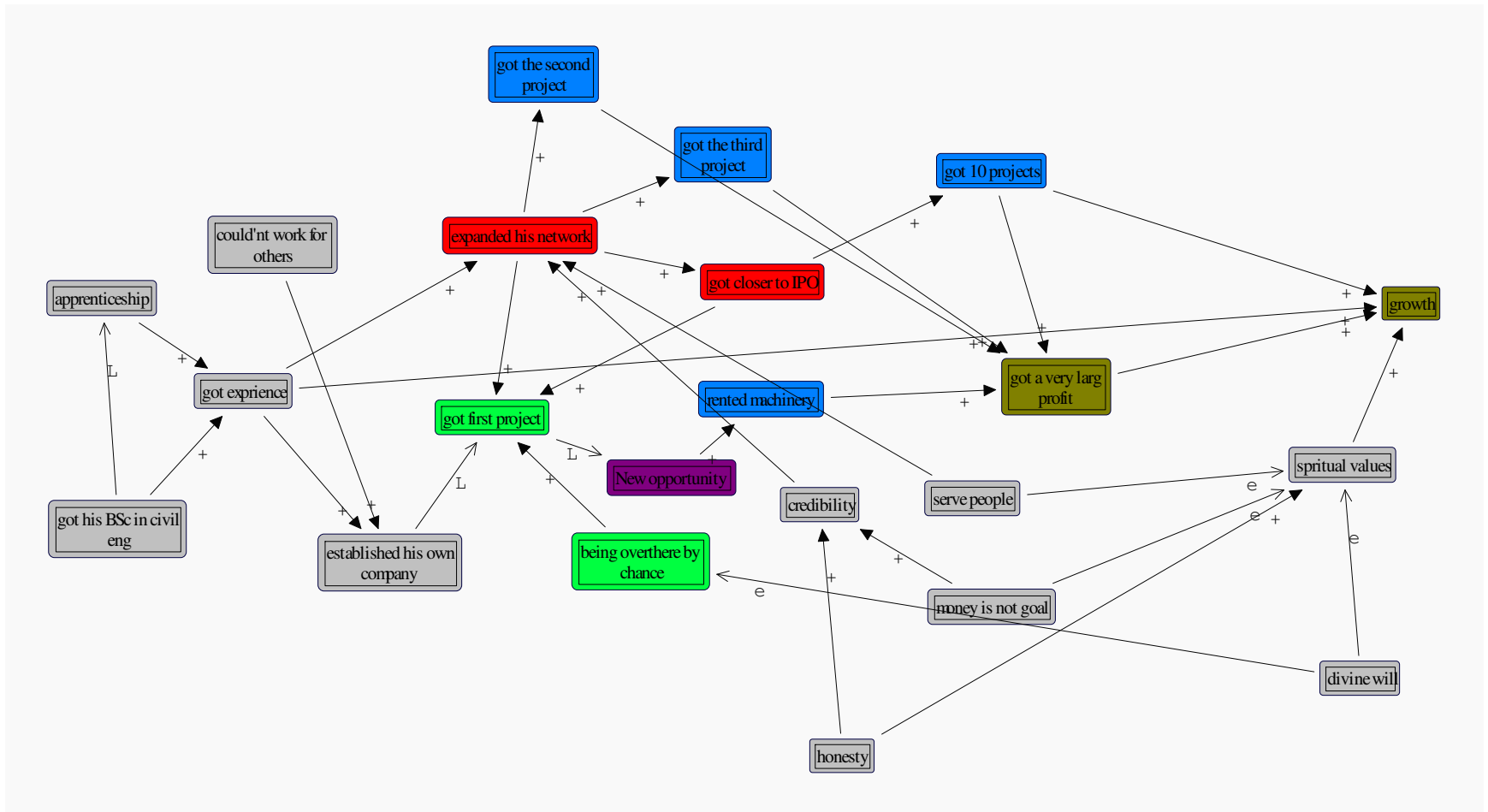


Figure-APX 10. TAR causal map

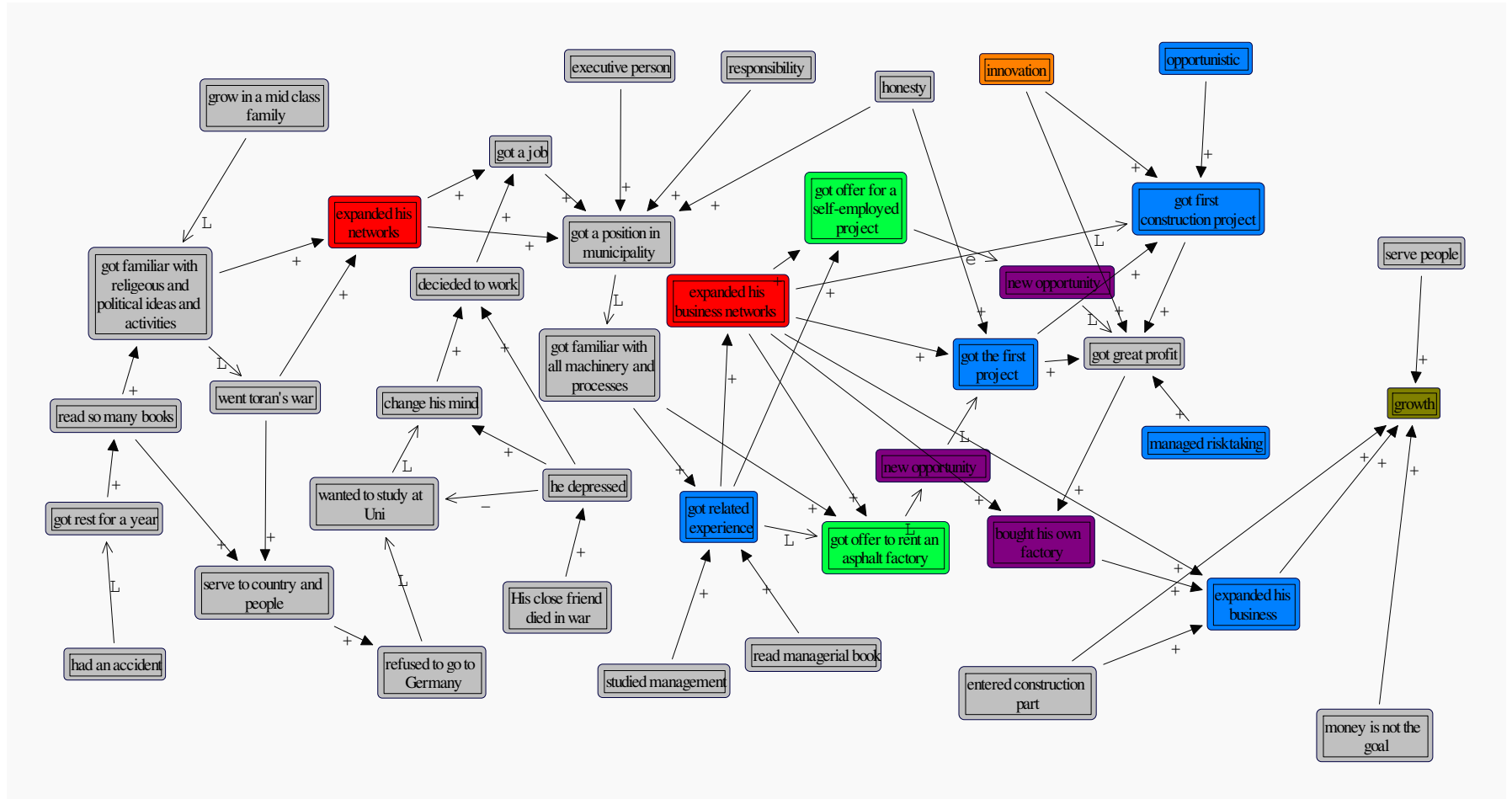


Figure-APX 11. TAZ causal map

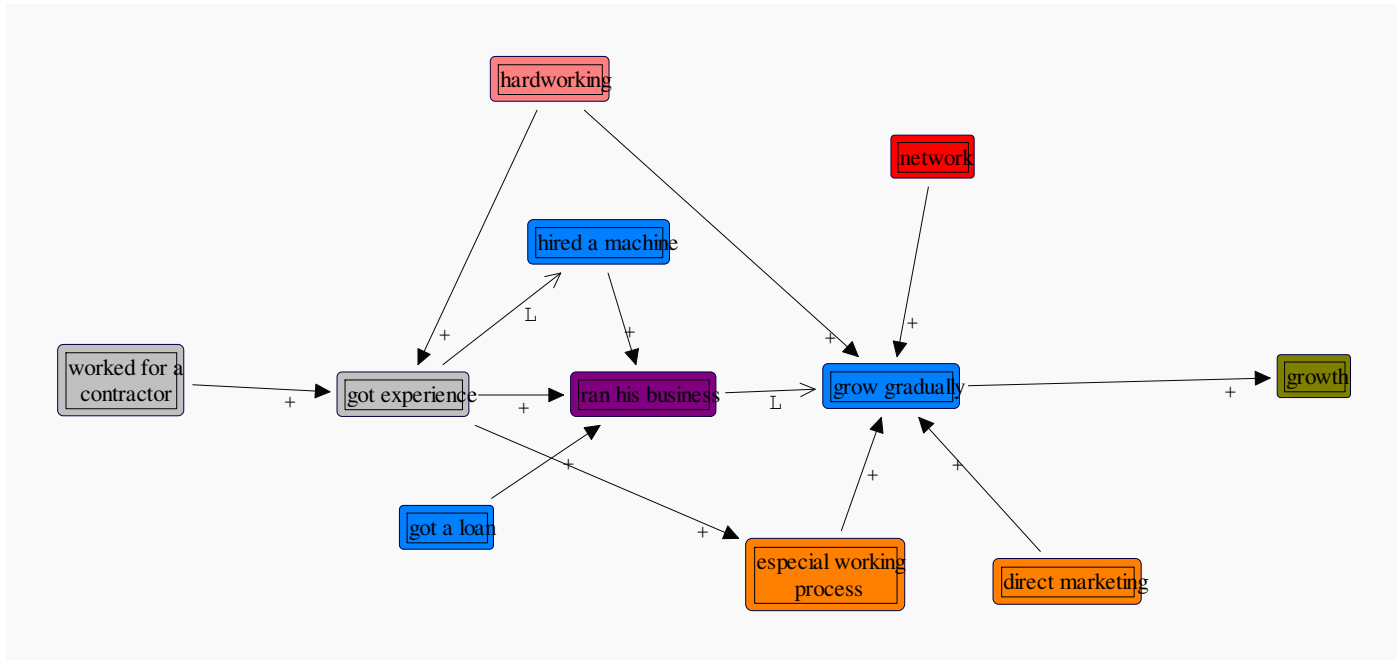


Figure-APX 12. ADK causal map

Wholesale Trade:

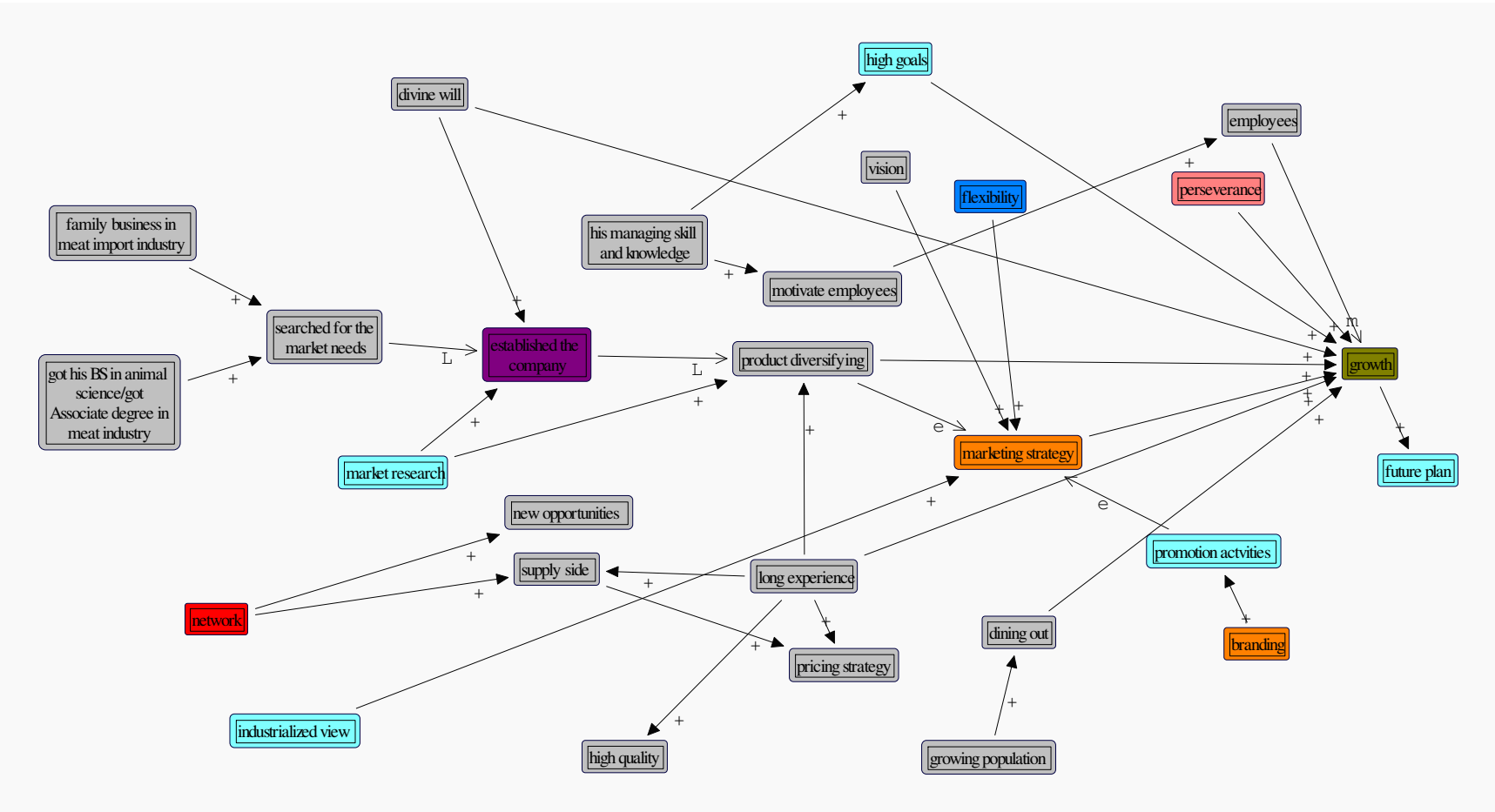


Figure-APX 13. TYA causal map

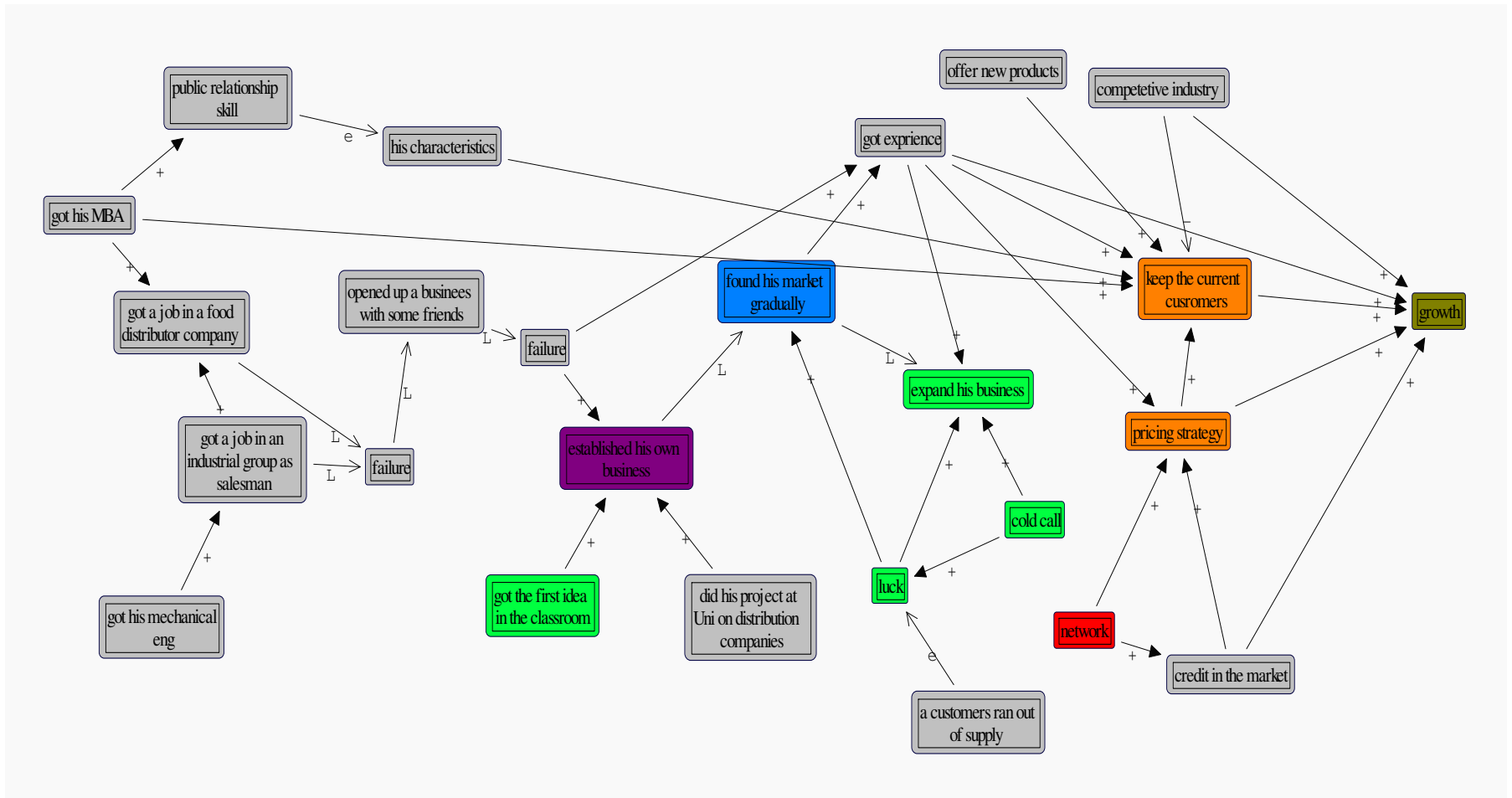


Figure-APX 14. THO causal map

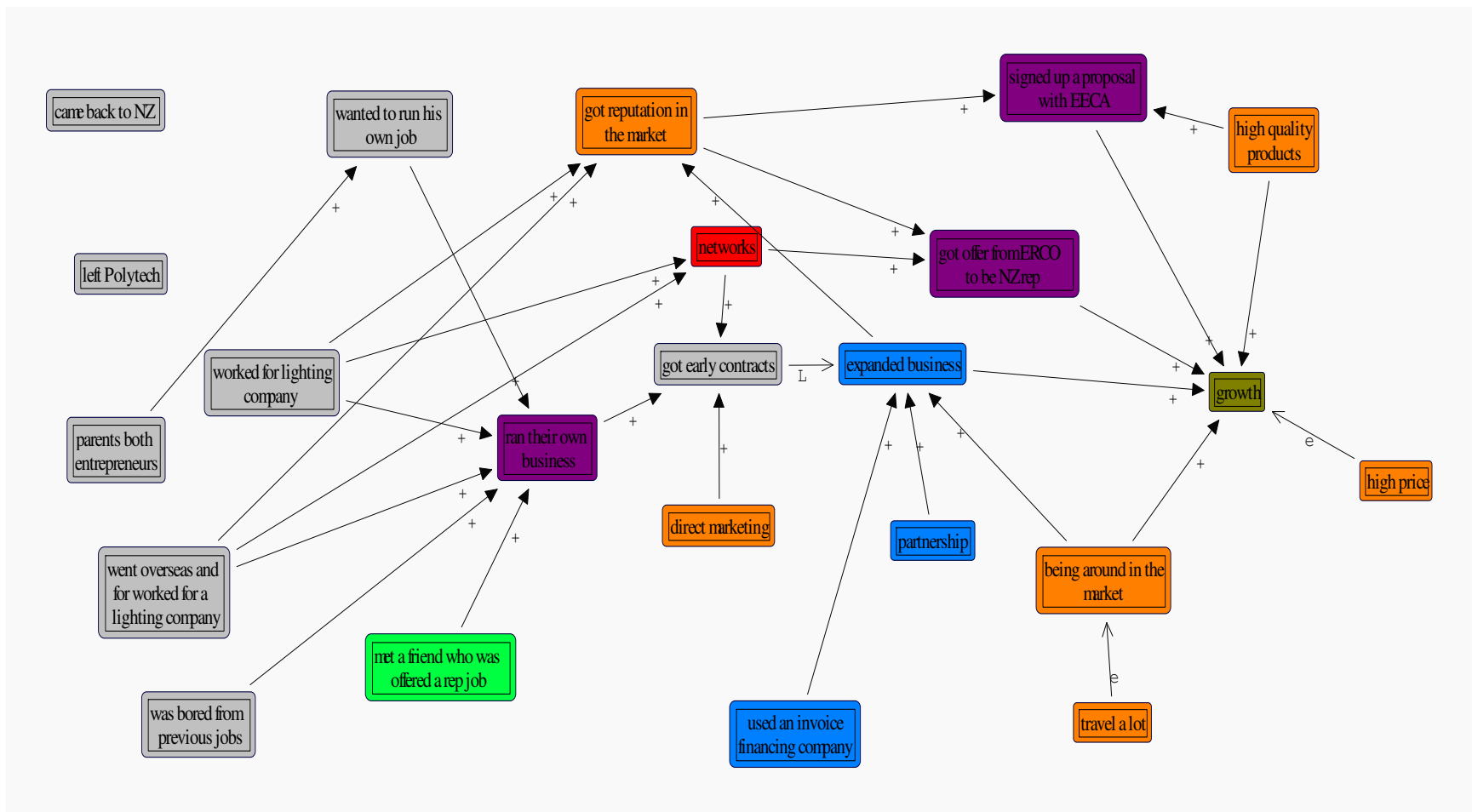


Figure-APX 15. CET causal map

Education and Training:

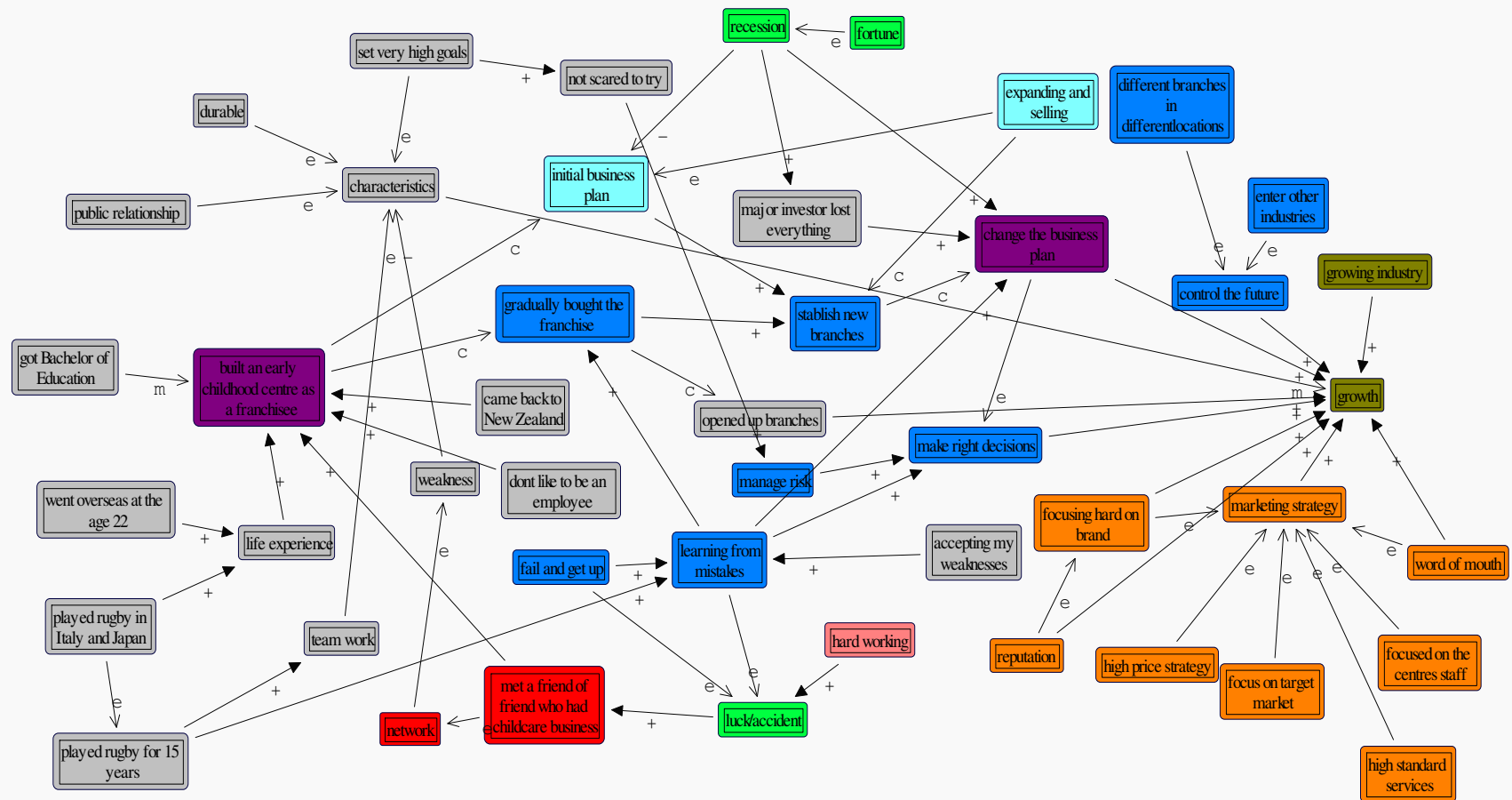


Figure-APX 16. ALE causal map

Online shopping and IT services:

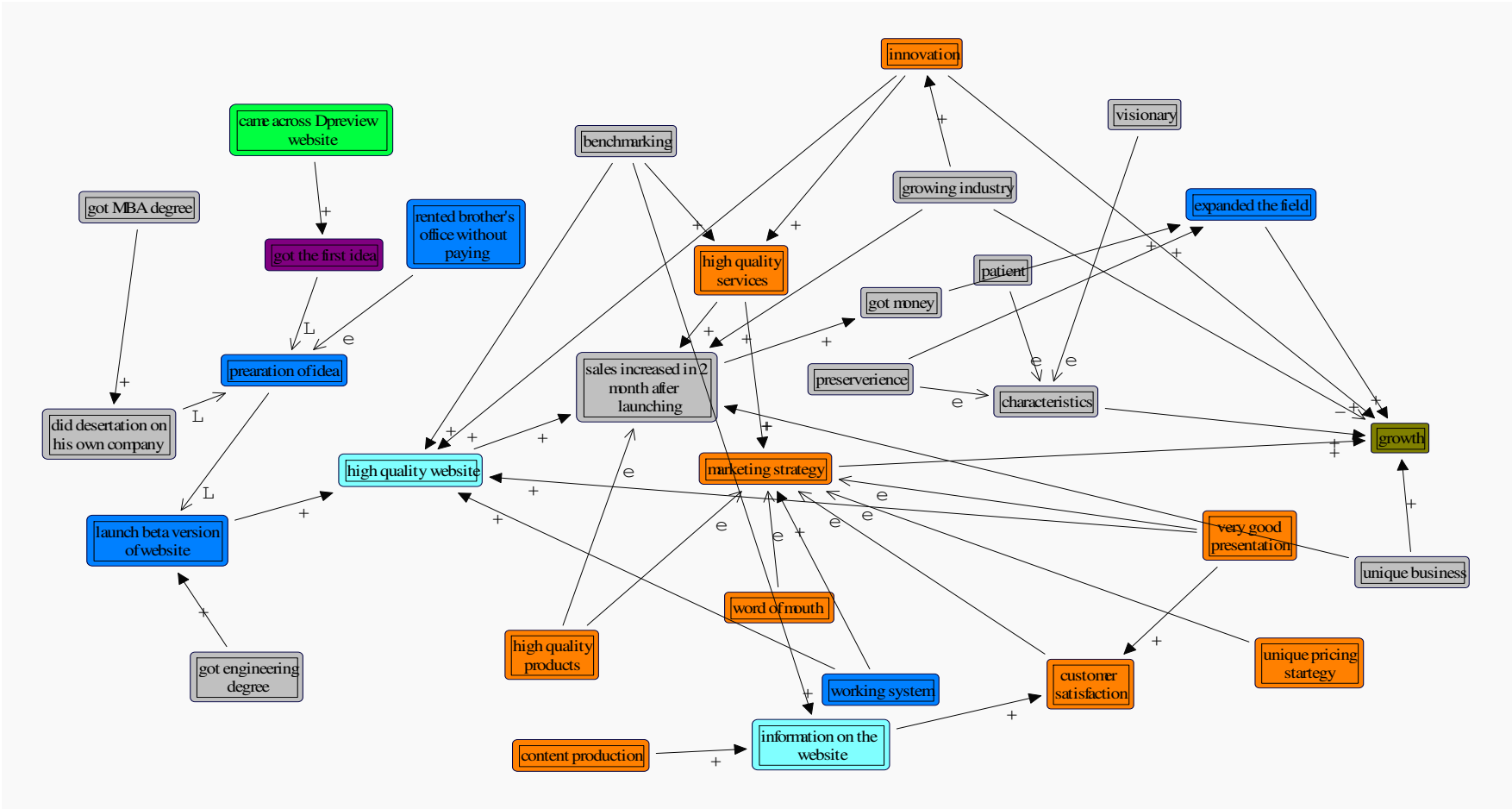


Figure-APX 17. TDI causal map

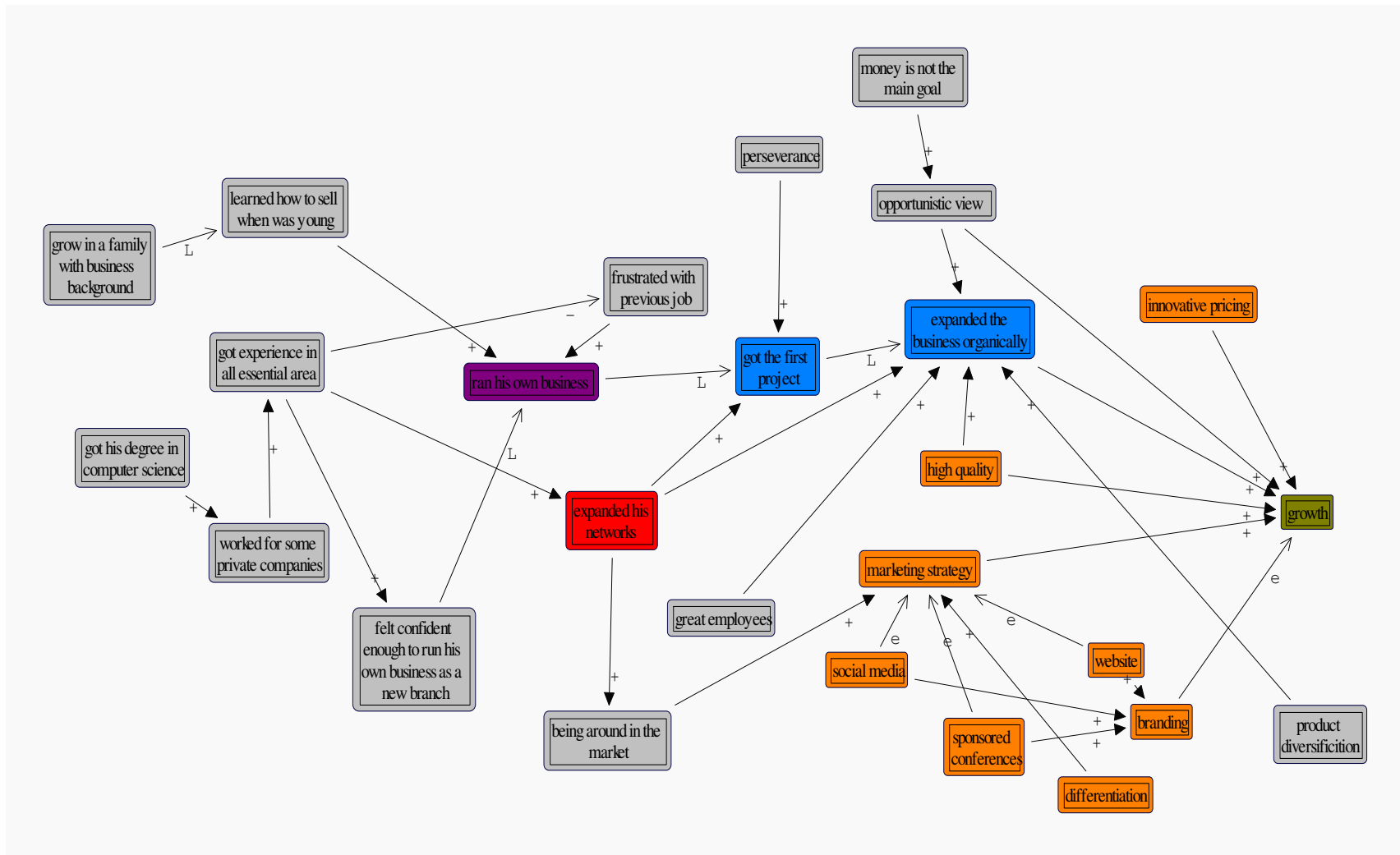


Figure-APX 18. ACL causal map

Manufacturing:

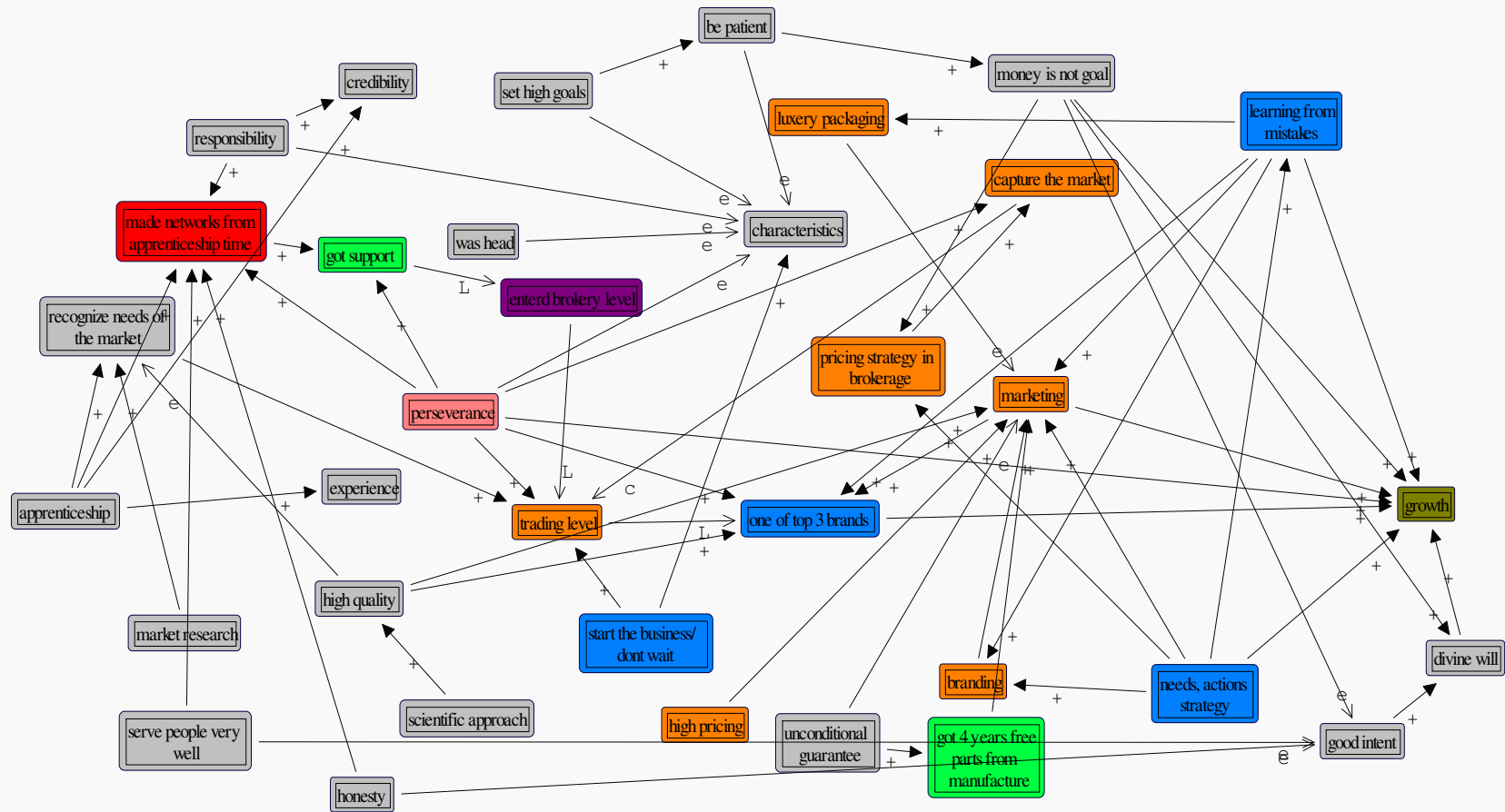


Figure-APX 19. TRO causal map

Rental, Hiring and Real Estate Services:

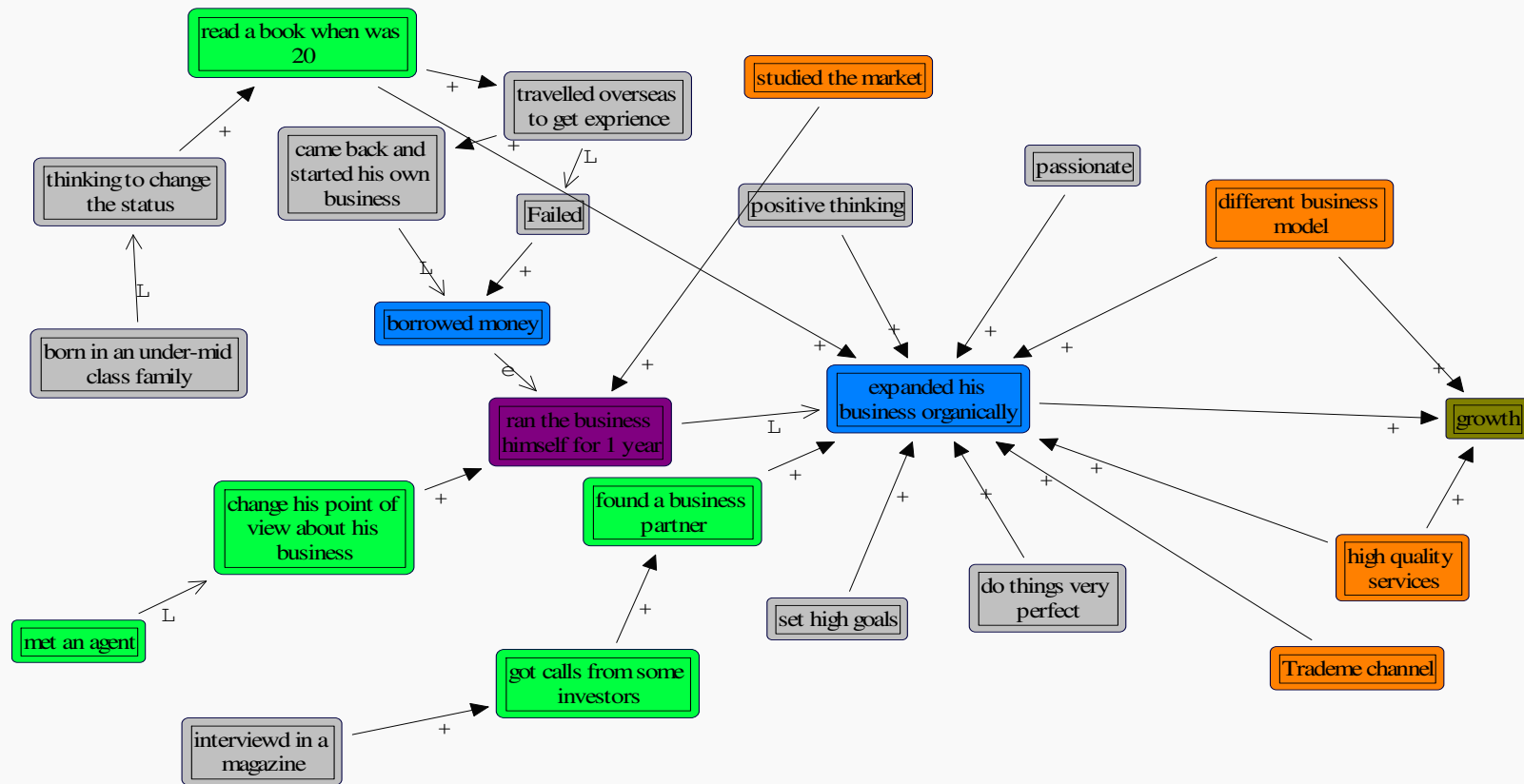


Figure-APX 20. AIY causal map

Appendix 2: Central Concepts in the Investigated Cases

Table-APX 1. Uncategorised central concepts in NZ firms and their scores

NZ	Original central concepts/Main reason of fast growth and scores
COP	knowledge and experience (21 from 37 concepts), Opportunistic view (18 from 35 concepts), Pricing strategy (16 from 34 concepts) Networks (16 from 31 concepts), Marketing strategy (14 from 25 concepts), luck (14 from 30 concepts), Being in a team in his previous job (13 from 29 concepts), Characteristics (13 from 28 concepts), Cold calls (12 from 27 concepts), Benchmarking (11 from 28 concepts), referrals (11 from 26 concepts), presence in the market (11 from 26 concepts), strategic plan (10 from 23 concepts), risk management (10 from 22 concepts), market research (10 from 26 concepts)
CPN	grow gradually (12 from 18 concepts), differentiation on services (10 from 16 concepts), expanded his business (10 from 20 concepts), serendipity (9 from 16 concepts), pricing strategy (8 from 16 concepts), competent staff (7 from 16 concepts), planning (7 from 16 concepts) perseverance (7 from 16 concepts) opportunistic view(7 from 16 concepts), network (7 from 16 concepts), found the opportunity in design (6 from 10 concepts), focus on agriculture sector (6 from 11 concepts), started his own business at his house (6 from 10 concepts) full service strategy (5 from 13 concepts), being around in the market (5 from 13 concepts)
CKE	marketing strategy (11 from 16 concepts), exporting to other countries (11 from 22 concepts), the only high quality raw pet food (11 from 19 concepts), big order from US (9 from 19 concepts), selling in NZ (9 from 21 concepts), hardworking (7 from 15 concepts), free from disease (7 from 16 concepts), nature of the niche market (7 from 17 concepts), new investor (6 from 13 concepts), social media (5 from 13 concepts), word of mouth (5 from 13 concepts), website (5 from 13 concepts), on line selling (5 from 13 concepts), different distribution models (5 from 13 concepts), high price (5 from 13 concepts)
CET	expanded his business (12 from 19 concepts), reputation in the market (11 from 19 concepts), networks (9 from 18 concepts), overseas experience (9 from 18 concepts), domestic experience (9 from 18 concepts), got offer from ERCO to be NZ representative (8 from 16 concepts), being around in the market (8 from 16 concepts), signed up a proposal with EECA (8 from 15 concepts), high quality products (6 from 14 concepts), partnership (6 from 16 concepts), high price (5 from 12 concepts), direct marketing (5 from 15 concepts), travel a lot (4 from 11 concepts), met his friend to establish his own business (4 from 11 concepts), got bored from previous jobs (4 from 11 concepts)
CST	aggressive business plan (14 from 23 concepts), learning process (12 from 21 concepts), chose target market carefully (12 from 21 concepts), high quality products (11 from 20 concepts), selling very well (11 from 20 concepts), disciplined processes (10 from 20 concepts), faster reaction in the market (9 from 19 concepts), export to china (9 from 19 concepts), attracted more share holders (8 from 21 concepts), worked in research area (8 from 16 concepts), network of advisors (7 from 15 concepts), disciplined staff (7 from 15 concepts), entered top segment of the market (7 from 15 concepts), high price strategy (6 from 13 concepts), well-established industry (6 from 15 concepts)
ASM	characteristics (23 from 41 concepts), luck (23 from 40 concepts), two big projects (22 from 43 concepts), road map (21 from 45 concepts), visionary (20 from 40 concepts), marketing strategy (19 from 39 concepts), innovation (17 from 40 concepts), hard working (17 from 36 concepts), business plan (17 from 38 concepts), self-confidence (17 from 34 concepts), risk taking (15 from 35 concepts), leadership skills (15 from 33 concepts), intuition (15 from 33 concepts), Positive thinking (15 from 33 concepts), networks (14 from 32 concepts)
ALE	changed the business plan (19 from 39 concepts), make right decisions (18 from 39 concepts), learning from mistakes (17 from 34 concepts), characteristics(16 from 32 concepts), opened up new branches (16 from 39 concepts) gradually bought the franchise (16 from 33 concepts), marketing strategy (14 from 27 concepts), world recession (13 from 29 concepts), word of mouth (12 from 27 concepts), focusing hard on brand (12 from 27 concepts), reputation (11 from 27 concepts), luck (11 from 25 concepts), met a friend of friend who had childcare business (11 from 24 concepts), played rugby for 15 years (11 from 25 concepts), Bankruptcy of major investment (10 from 24 concepts)
ACL	expanded the business organically (13 from 23 concepts), networks (12 from 24 concepts), marketing strategy (10 from 17 concepts), opportunistic view (9 from 19 concepts), being around in the market (9 from 21 concepts), high quality services (9 from 19 concepts), branding (8 from 16 concepts), experience in all essential area (8 from 17 concepts), great employees (6 from 15 concepts), innovative pricing (6 from 16 concepts), product diversification (6 from 15 concepts), sponsored conferences (5 from 12 concepts), website (5 from 12 concepts), social media (5 from 12 concepts), perseverance (5 from 14 concepts)
AIY	expanded the business organically (15 from 20 concepts), read a book when was 20 (10 from 18 concepts), high quality services (8 from 17 concepts), different business models (8 from 17 concepts), Trademe channel (8 from 17 concepts), his business partner (8 from 18 concepts), being passionate (8 from 17 concepts), did things very perfect (8 from 17 concepts), high goals (8 from 17 concepts), positive thinking (8 from 17 concepts), overseas experience (7 from 17 concepts), studied the market (6 from 16 concepts), change his point of view about his business (6 from 16 concepts), thinking to change his financial status (6 from 15 concepts), got calls from some investors (5 from 13 concepts)
ADK	grew gradually (7 from 10 concepts), previous experience (7 from 10 concepts), especial working process (5 from 10 concepts) rented a machine (5 from 10 concepts), hardworking (5 from 10 concepts), networks (4 from 9 concepts), direct marketing (4 from 9 concepts), bank loan (4 from 10 concepts)

Table-APX 2. Uncategorised central concepts in Iranian firms and their scores

IR	Original central concepts/Main reason of fast growth and scores
TRO	Perseverance (18 from 33 concepts), Marketing strategy (16 from 27 concepts), networks (15 from 28 concepts), characteristics (14 from 26 concepts), learning from mistakes (13 from 25 concepts), high quality products (13 from 27 concepts), recognised the needs of the market (13 from 27 concepts), money is not the goal (13 from 26 concepts), Support of networks (12 from 27 concepts), need, action strategy (12 from 23 concepts), pricing strategy (11 from 26 concepts), Apprenticeship experience (11 from 21 concepts), divine will (10 from 23 concepts), Being patient (10 from 22 concepts)
TBE	marketing strategy (16 from 28 concepts), high quality products (16 from 31 concepts), be in the market (13 from 24 concepts), high price (12 from 27 concepts), main principals (12 from 21 concepts), product diversification (11 from 25 concepts), customer loyalty (11 from 26 concepts), hired good production consultant (11 from 26 concepts), Learning from mistakes (10 from 19 concepts), branding (9 from 22 concepts), positioning (9 from 19 concepts), systematic sales department (9 from 22 concepts), hired marketing consultant (9 from 17 concepts), convinced the customers to buy (8 from 16 concepts), family business (8 from 18 concepts)
TDI	marketing strategy (14 from 23 concepts), high standard website (13 from 25 concepts), high quality services (11 from 20 concepts), innovation (11 from 24 concepts), very good presentation (10 from 22 concepts), benchmarking (10 from 20 concepts), growing industry (10 from 21 concepts), unique business (9 from 21 concepts), customer satisfaction (9 from 19 concepts), good working system (9 from 21 concepts), high quality products (9 from 19 concepts), characteristics (9 from 19 concepts), expanded the field (9 from 19 concepts), unique pricing strategy (7 from 17 concepts), word of mouth (7 from 17 concepts)
THO	experience (13 from 22 concepts), customers loyalty (12 from 20 concepts), pricing strategy (10 from 18 concepts), found his market gradually (10 from 19 concepts), failure (10 from 21 concepts), got his MBA (9 from 18 concepts), characteristics (7 from 14 concepts), luck (7 from 12 concepts), credit in the market (6 from 12 concepts), offered new products (6 from 14 concepts), public relationship skill (5 from 11 concepts), network (5 from 12 concepts), cold calls (4 from 10 concepts), did his project at Uni on distribution companies (3 from 8 concepts)
TME	unique business (11 from 22 concepts), got big projects (10 from 19 concepts), opportunistic view (9 from 19 concepts), changed management system (9 from 18 concepts), marketing strategy (8 from 15 concepts), failure (8 from 17 concepts), hard working (7 from 16 concepts), network (5 from 11 concepts), word of mouth (4 from 10 concepts), presence in the market (4 from 10 concepts), marketing plan (4 from 10 concepts), Teaching skills (4 from 7 concepts), innovative person (3 from 7 concepts), like construction and building activities (3 from 7 concepts), communication skills (2 from 6 concepts)
TTM	characteristics (15 from 27 concepts), finding new opportunities (12 from 21 concepts), marketing strategy (12 from 21 concepts), experience and knowledge (12 from 24 concepts), innovation (11 from 21 concepts), the first project (11 from 25 concepts), different point of view (10 from 22 concepts), differentiation (10 from 21 concepts), many projects (10 from 24 concepts), failure engineering (9 from 22 concepts), high price (9 from 21 concepts), service diversification (9 from 21 concepts), learning process (8 from 17 concepts), being around in the market (8 from 16 concepts), Perseverance (8 from 20 concepts)
TYA	product diversifying (14 from 26 concepts), marketing strategy (13 from 23 concepts), experience (13 from 24 concepts), divine will (11 from 24 concepts), future plan (9 from 21 concepts), growing industry (9 from 21 concepts), perseverance (9 from 21 concepts), high goals (9 from 21 concepts), great employees (9 from 21 concepts), market research (8 from 21 concepts), bargaining power on supply side (8 from 16 concepts), promotional activities (7 from 16 concepts), pricing strategy (7 from 16 concepts), industrialised point of view (6 from 16 concepts), high quality (6 from 15 concepts)
TAL	expanded the business (15 from 25 concepts), marketing strategy (12 from 20 concepts), innovation (12 from 20 concepts), differentiation (12 from 25 concepts), perseverance (10 from 25 concepts), got big projects (10 from 18 concepts), flexibility (9 from 20 concepts), product diversification (8 from 20 concepts), pricing strategy (8 from 20 concepts), being around in the market (8 from 20 concepts), planning (7 from 16 concepts), strengthened branding (7 from 16 concepts), family business (7 from 18 concepts), team work (7 from 18 concepts), promotional activities (6 from 15 concepts)
TAR	Networks (12 from 20 concepts), got first project (11 from 20 concepts), experience (11 from 20 concepts), spiritual values (10 from 19 concepts), got closer to IPO (10 from 20 concepts), got some big projects (10 from 19 concepts), credibility (9 from 19 concepts), served people well (9 from 19 concepts), rented machinery (8 from 16 concepts), luck (7 from 18 concepts), divine will (6 from 15 concepts), money is not the goal (6 from 15 concepts), honesty (6 from 15 concepts), apprenticeship (6 from 15 concepts), got bored with previous jobs (4 from 10 concepts)
TAZ	Networks (12 from 20 concepts), experience (12 from 22 concepts), got the first project (11 from 22 concepts), got offer to rent an asphalt factory (11 from 22 concepts), expanded his business (10 from 19 concepts), got first construction project (10 from 18 concepts), got familiar with all machinery and processes (10 from 20 concepts), bought his own factory (9 from 19 concepts), honesty (9 from 21 concepts), spiritual values (8 from 15 concepts), wish to serve to country and people (7 from 13 concepts), innovation (6 from 12 concepts), managed risk taking (5 from 12 concepts), opportunistic point of view (5 from 12 concepts), read managerial book (5 from 12 concepts)

Table-APX 3. The main reason of growth in ‘Professional, Scientific and Technical Services’ industry

Professional, Scientific and Technical Services					
Iran			New Zealand		
TME	TTM	TAL	COP	CPN	ASM
Nature of industry/growing industry Profitable projects/contracts Opportunism Management system Marketing practices Learning organisation/processes Perseverance Networks/ Communication skills Presence in the market Planning Knowledge and experience Innovation Word frequencies: Friend/s 24 Luck 12 Management 10 Decision 9 Effort 8 Opportunity 8 Risk 7 Serendipity 7 Diversification 7 Customer 7 Differentiation 6 Quality 5 Motivation 5	Characteristics Opportunism Marketing practices Knowledge and experience Innovation The first project Differentiation Profitable projects/contracts Learning organisation/processes High price strategy Product/service diversification Learning organisation/processes Presence in the market Perseverance Word frequencies: Marketing 26 Research 25 Market 23 Opportunity 18 Differentiation 9 Risk 7 Price 7 Luck 5 Presence 5 Growth 5	Product/service diversification Marketing practices Innovation Differentiation Perseverance Profitable projects/contracts Flexibility Pricing strategy Presence in the market Planning Branding Family business Great staff Word frequencies: Effort 22 Customer/s 22 Advertising 17 Luck 16 Plan 15 System 15 Contract 14 Monthly brochure 13 Festival 13 Price 12 Sale 12 Network/s 9 Innovation 8 Flexibility 7 Website 7 Progress 6 Presence 6 Product 6 Serendipity 6 Research 6 Trust 5 Growth 5	Knowledge and experience Opportunism Pricing strategy Networks/ Communication skills Marketing practices Serendipity Characteristics Benchmarking Presence in the market Planning Risk management Word frequencies: Management 26 Market 17 Business 15 Luck/y 13 Client/s 12 Services 11 Engineering 10 Consulting 8 Growth 8 Marketing 8 Opportunity 7	Differentiation Product/service diversification Serendipity Pricing strategy Great staff Planning Perseverance Opportunism Networks/ Communication skills Presence in the market Word frequencies: Business 26 Client/s 21 People 15 Luck/y 15 Opportunity 13 Networking 11 Chance 10 Market 10 Marketing 8 Different 7 Competitors 5	Characteristics Serendipity Profitable projects/contracts Planning Marketing practices Opportunism Innovation Perseverance Risk management Networks/ Communication skills Word frequencies: Luck/y 26 Risk 14 Networking 9 Brand 7 Client/s 6 Entrepreneur 6 Rugby 6 Success 6 Industry 5

Table-APX 4. The main reason of growth in Food industries

Food industries		
Iran	New Zealand	
TBE	CKE	CST
Marketing practices High quality products Presence in the market High price strategy Spiritual values Product/service diversification Customer loyalty Great consultants Learning organisation/processes Branding Positioning Management system Family business Word frequencies: Manufacturing 45 Quality 33 Price 27 Luck/y19 Growth 18 Consultant 15 Experience 13 Marketing 12 Product 11 Customer/s 11 Industry 10 God 7 Strategy 6 Research 5	Marketing practices Exporting High quality products Big order from US Perseverance Nature of industry/growing industry Capital injection Online selling Various distribution models High price strategy Word frequencies: People 29 Product 21 Luck/y 11 Business 15 Decision 9 Quality 9 Marketing 7	Planning Learning organisation/processes Chose target market carefully Opportunism High quality products Management system Faster reaction in the market Exporting Capital injection Knowledge and experience Networks/ Communication skills Great staff High price strategy Nature of industry/growing industry Word frequencies: People 38 Discipline/d 28 Product 22 Learning/s 21 Market 19 Growing/growth 15 Opportunity/ies 13 Industry 11 Capital 9 Development 9 Strategy 9 Predictable 8 Entrepreneurial 7 Quality 7 Information 6 Luck 6 Serendipity 6 Successful 6 Pricing 5

Table-APX 5. The main reason of growth in Construction industry

Construction		
Iran		New Zealand
TAR	TAZ	ADK
<p>Networks/ Communication skills The first project Knowledge and experience Spiritual values Profitable projects/contracts Credibility Machinery/facility renting Serendipity Divine will Money is not the goal Honesty Got bored with previous jobs</p> <p>Word frequencies: Serendipity 23 Networks 15 Experience 15 Honesty 11 Risk 12 God 7 Success 5 Luck 4</p>	<p>Networks/ Communication skills Knowledge and experience The first project Machinery/facility renting Product/service diversification Spiritual values Innovation Managed risk taking Opportunism</p> <p>Word frequencies: Friend/s 34 Risk 19 Management 8 Price 6 Business 5 God 5</p>	<p>Grew gradually Knowledge and experience Especial working process Machinery/facility renting Perseverance Networks/ Communication skills Marketing practices Capital injection</p> <p>Word frequencies: Business 19 People 19 Luck 13 Growth 10 Process 8 Risk 8 Attitude 6 Energy 6 Machines 6 Opportunity 5</p>

Table-APX 6. The main reason of growth in Wholesale Trade industry

Wholesale Trade	
Iran	
TYA	THO
Product/service diversification Marketing practices Knowledge and experience Divine will Planning Nature of industry/growing industry Perseverance Set high goals Great staff Market research/Realised market needs Bargaining power on supply side Branding Pricing strategy High quality products Word frequencies: God 37 Think/ing 21 Market 10 Luck 9 Research 9 Price 9 Purchasing power 8 Brand/ing 7 Team 6 Experience 6 Risk 5 Networking 5 Goal/s 5 Profit 5	Knowledge and experience Customers' loyalty Pricing strategy Grew gradually Characteristics Serendipity Credibility Product/service diversification public relationship skill Networks/ Communication skills Cold calls Word frequencies: Customer/s 40 Price/s 39 Market 23 Profit 18 Luck 15 Turbulent 13 Mistakes 7

Table-APX 7. The main reason of growth in Manufacturing

Manufacturing	
Iran	New Zealand
TRO	CET
Perseverance Marketing practices Networks/ Communication skills Characteristics Learning organisation/processes High quality products Market research/Realised market needs Money is not the goal Need, action strategy High Price strategy Knowledge and experience Divine will Beingpatient Word frequencies: Broker 18 Apprenticeship 18 People 16 Luck 15 God 13 Perseverance 12 Quality 11 Experience 9	Marketing practices Exporting High quality products Profitable projects/contracts Perseverance Nature of industry/growing industry Capital injection Different distribution models High price strategy Word frequencies: Business 35 Market27 Product/s 28 People 27 Luck/y 19 Customer/s 11 Serendipity 9 Opportunity 7 Staff 7 Change 6 Industry 6 Risk 6 Price 6 Successful 5

Table-APX 8. The main reason of growth in IT industry

Online shopping and IT services	
Iran	New Zealand
TDI	ACL
Marketing practices High standard website High quality services Innovation Benchmarking Nature of industry/growing industry Customer satisfaction Management system High quality products Characteristics Product/service diversification Pricing strategy Word frequencies: Information 28 Product/s 20 Product 18 Website 18 Internet 18 New idea 16 Sale 14 Digital 14 Online 12 Innovation 10 Business planning 8 Feedback 5 Opportunity 5	Grew organically Networks/ Communication skills Marketing practices Opportunism Presence in the market High quality services Branding Knowledge and experience Innovation Great staff Pricing strategy Product/service diversification Perseverance Word frequencies: People 37 Business 29 Luck/lucky 28 Different 21 Environment 18 Project/s 16 Create/ing 14 Opportunity 13 Service/s 12 Management 11 Market 11 Strategy 11 Chance 10 Growth 10 Opportunity 9 Serendipity 9 Technology 9 Vision 9 Development 6 Marketing 5

Table-APX 9. The main reason of growth in Education and Real Estate industry

Education and Training	Rental, Hiring and Real Estate Services
ALE	AIY
Planning Knowledge and experience Learning organisation/processes Characteristics Product/service diversification Marketing strategy World recession Branding Credibility Serendipity Networks/ Communication skills Word frequencies: Business 28 People 22 Luck/y 16 Risk 15 Mistake/s 7 Learn 6	Grew organically Read a book when was 20 High quality services Different business models Trademe channel Capital injection Passion Set high goals Characteristics Knowledge and experience Market research/Realised market needs Word frequencies: Serendipity/ous 24 People 18 Growth 10 Lucky 10 Book 7 Successful 5

Appendix 3: An overview of Iran and New Zealand economy

	Iran	World Raking	New Zealand	World Raking
Population	80,840,713 (July 2014 est.)	19	4,401,916 (July 2014 est.)	127
GDP - real growth rate	-1.5% (2013 est.)	208	2.5% (2013 est.)	130
GDP - per capita (PPP)	\$12,800 (2013 est.)	103	\$30,400 (2013 est.)	46
GDP - composition by sector:	agriculture: 10.6% industry: 44.9% services: 44.5% (2013 est.)		agriculture: 5% industry: 25.5% services: 69.5% (2013 est.)	
Labor force - by occupation	agriculture: 16.9% industry: 34.4% services: 48.7% (2012 est.)		agriculture: 7% industry: 19% services: 74% (2006 est.)	
Unemployment rate	16% (2013 est.)	144	6.4% (2013 est.)	66
Investment (gross fixed)	27.6% of GDP (2010 est.)	27	19.6% of GDP (2010 est.)	94
Inflation rate (consumer prices)	42.3% (2013 est.)	222	1.3% (2013 est.)	36
Industrial production growth rate	-5.2% (2013 est.)	191	1.9% (2013 est.)	128
Oil - production	3.594 million bbl/day (2012 est.)	6	48,190 bbl/day (2012 est.)	64
Natural gas - production	162.6 billion cu m (2012 est.)	3	4.59 billion cu m (2012 est.)	53
Exports	\$61.22 billion (2013 est.) petroleum 80%, chemical and petrochemical products, fruits and nuts, carpets	53	\$37.84 billion (2013 est.) dairy products, meat, wood and wood products, fish, machinery	62
Imports	\$64.42 billion (2013 est.) Industrial supplies, capital goods, foodstuffs and other consumer goods, technical services	46	\$37.35 billion (2013 est.) machinery and equipment, vehicles, aircraft, petroleum, electronics, textiles, plastics	63

Note: data are in 2013 US dollars

Reference: www.cia.gov/library/publications/the-world-factbook/

Appendix 4: The Interview Protocol

Interview Guideline

Interview code:

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Firm and entrepreneur's Information
<p>Company name: Growth: Address:</p> <p>Description of business activities: Age? No. of employees? No. of products? No. of markets? NO of export market? Revenue if is not confidential? Private or governmental?</p> <p>Entrepreneur's general information: Name: Gender: Age: Personal background: Education Family Economic/financial background Previous experiences</p>
Questions related to growth
<p>Mapping exercise Plotting out previous and the current business growth story and history Growth strategies Reasons for growth: Characteristics? Network? Experience? Any events? Employees? Firm's operation? Others?</p>
Question related to serendipity
<p>Initial idea for the current business: Field of study/knowledge/prior experience? Any sort of search? Event?</p> <p>Opportunity exploitation: Who I am? What I know? Whom I know? Relationship between growth and given set of means?</p>
<p>Present time/Past time: Event? Now or initial stage?</p>

Questions related to effectuation logic
Affordable loss: Considering financial situation to start a new business? Different from initial stage?
Risk-taking Criteria to make a decision Information/research? Gut feeling?
Partnership: New business, joint/alone?
Future control: Source of information? Plan for future?
Questions related to EM and practices
Using serendipity in the market? Special strategies? Special marketing plan? Example?
Strategy flexibility: Written or unwritten strategy/plan? Percentage of change? Firm's goal?
4Ps approach: Price strategy? Promotion? Chanel? Product strategy?
Source of information about market: Research? Staff? Customer?
Holistic thinking: Marketing or organization problem?
Any other practices contributes to growth?

Do you believe in luck/serendipity?

Do you consider yourself lucky? Why? Why not?

(If so) Can you tell me some lucky events that have occurred in your life?

Something to feel regret about? Some opportunities or luck you couldn't take it?

What about in the course of your business?

How long do you think you can stay lucky in business?